

3.1

**Number of courses in all programmes  
yearwise during the current year**



**3.1****List of courses in all Programmes**

| <b>Sr. No.</b> | <b>Name of Department</b>                              | <b>Page No.</b> |
|----------------|--|-----------------|
| 1.             | Department of Chemistry                                | 1-3             |
| 2.             | Department of Physics                                  | 4-5             |
| 3.             | Department of Mathematics                              | 6-7             |
| 4.             | Department of Civil Engineering                        | 8-10            |
| 5.             | Department of Computer Science Engineering             | 11-18           |
| 6.             | Department of Mechanical Engineering                   | 19-21           |
| 7.             | Department of Electrical Engineering                   | 22-28           |
| 8.             | Department of Electronics & Communication Engineering  | 29-31           |
| 9.             | Department of Food Science & Technology                | 32-34           |
| 10.            | Department of Management Studies                       | 35-40           |
| 11.            | Department of Hotel Management                         | 41-46           |
| 12.            | Department of Journalism & Mass Communication          | 47-48           |
| 13.            | Department of Humanities, Languages & Cultural Studies | 49              |
| 14.            | IKGPTU Hoshiarpur Campus                               | 50-54           |
| 15.            | IKGPTU Amritsar Campus                                 | 55-59           |
| 16.            | IKGPTU Mohali-I Campus                                 | 60-61           |
| 17.            | IKGPTU Mohali-II Campus                                | 62-66           |

IKGPTO/CHEM/313  
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Department of Chemistry

3.1 List of courses offered across all programs during the year 2022-23

| Program code   | Program name  | Course code | Course name                          | Year of offering the course |                           |         |
|----------------|---|-------------|--------------------------------------|-----------------------------|---------------------------|---------|
| 12001          | PhD (Chemical Science)                                    | 77360       | Advanced Organic Chemistry           | 2016-17                     |                           |         |
|                |   | 77372       | Laboratory Practices & Safety        | 2016-17                     |                           |         |
|                |   | 77390       | Research Methodology                 | 2016-17                     |                           |         |
| 207            | MSc. Chemistry  | CHL401-18   | Inorganic Chemistry-I                | 2018-19                     |                           |         |
|                |   | CHL402-18   | Reactive Intermediates-I             | 2018-19                     |                           |         |
|                |   | CHL403-18   | Physical Chemistry-I                 | 2018-19                     |                           |         |
|                |   | CHL404-18   | Spectroscopy - I                     | 2018-19                     |                           |         |
|                |   | CHL405-18   | Environmental Chemistry              | 2018-19                     |                           |         |
|                |   | CHL-406A-18 | Human Physiology                     | 2018-19                     |                           |         |
|                |   | CHL-406B-18 | Numerical Methods for chemists       | 2018-19                     |                           |         |
|                |   | CHP407-18   | Inorganic Chemistry Lab              | 2018-19                     |                           |         |
|                |   | CHP408-18   | Organic Synthesis Lab                | 2018-19                     |                           |         |
|                |   | CHL411-18   | Inorganic Chemistry-II               | 2018-19                     |                           |         |
|                |   | CHL412-18   | Reactive Intermediates-II            | 2018-19                     |                           |         |
|                |   | CHL413-18   | Physical Chemistry-II                | 2018-19                     |                           |         |
|                |   | CHL414-18   | Spectroscopy - II                    | 2018-19                     |                           |         |
|                |   | CHL415A-18  | Chemistry of Materials               | 2018-19                     |                           |         |
|                |   | CHL415B-18  | Chemical Biology                     | 2018-19                     |                           |         |
|                |   | CHP416-18   | Physical Chemistry Lab               | 2018-19                     |                           |         |
|                |   | CHP417-18   | Advanced Chemistry Lab-I             | 2018-19                     |                           |         |
|                |   | CHL501-18   | Inorganic Chemistry-III              | 2018-19                     |                           |         |
|                |   | CHL502-18   | Advanced Organic Chemistry -I        | 2018-19                     |                           |         |
|                |   | CHL503-18   | Physical Chemistry-III               | 2018-19                     |                           |         |
|                |   | CHL504-18   | Advanced Characterization Techniques | 2018-19                     |                           |         |
|                |   | CHL505A-18  | Biophysical chemistry                | 2018-19                     |                           |         |
|                |   | CHL505B-18  | Medicinal Chemistry                  | 2018-19                     |                           |         |
|                |   | CHL505C-18  | Advanced Functional Materials        | 2018-19                     |                           |         |
|                |   | CHP506-18   | Advanced Chemistry Lab-II            | 2018-19                     |                           |         |
|                |   | CHP507-18   | Dissertation **                      | 2018-19                     |                           |         |
|                |   | CHL511-18   | Advanced Organic Chemistry- II       | 2018-19                     |                           |         |
|                |   | CHL512A-18  | Advanced physical Chemistry          | 2018-19                     |                           |         |
|                |   | CHL512B-18  | Chemical Toxicology                  | 2018-19                     |                           |         |
|                |   | CHL512C-18  | Supramolecular Chemistry             | 2018-19                     |                           |         |
|                |   | CHL512D-18  | Chemistry of Natural Products        | 2018-19                     |                           |         |
|                |   | CHL512E-18  | Green Chemistry                      | 2018-19                     |                           |         |
|                |   | CHL512F-18  | Computational Chemistry              | 2018-19                     |                           |         |
|                |   | CHP513-18   | Research Seminar                     | 2018-19                     |                           |         |
|                |   | CHP514-18   | Dissertation **                      | 2018-19                     |                           |         |
|                |   | 511         | BSc Hons Chemistry                   | BHCL101-19                  | Inorganic Chemistry-I     | 2019-20 |
|                |   |             |                                      | BHCL102-19                  | Organic Chemistry-I       | 2019-20 |
|                |   |             |                                      | UC-BSHP-112-19              | Electricity and Magnetism | 2019-20 |
|                |   |             |                                      | UC-BSHM-104-19              | Maths-I (Calculus-I)      | 2019-20 |
|                |   |             |                                      | UC-CEL105-19                | Communicative English-I   | 2019-20 |
|                |   |             |                                      | BHHL106A-19                 | Punjabi Compulsory-I      | 2019-20 |
|                |   |             |                                      | BHHL106B-19                 | Mudhli Punjabi-I          | 2019-20 |
|                |   |             |                                      | BHCP107-19                  | Inorganic Chemistry Lab-I | 2019-20 |
|                |   |             |                                      | BHCP108-19                  | Organic Chemistry Lab-I   | 2019-20 |
|                |   |             |                                      | UC-BSHP-113-19              | Physics Lab-I             | 2019-20 |
|                |   |             |                                      | BHCL111-19                  | Inorganic Chemistry-II    | 2019-20 |
|                |   |             |                                      | BHCL112-19                  | Physical Chemistry-I      | 2019-20 |
| UC-BSHP-124-19 | Waves and Vibrations                                      |             |                                      | 2019-20                     |                           |         |
| UC-BSHM-204-19 | Vector Algebra & Vector Analysis                          |             |                                      | 2019-20                     |                           |         |
| BHHL115-19     | Communicative English-II                                  |             |                                      | 2019-20                     |                           |         |
| BHHL116A-19    | Punjabi Compulsory-II                                     |             |                                      | 2019-20                     |                           |         |
| BHHL116B-19    | Mudhli Punjabi-II   |             |                                      | 2019-20                     |                           |         |
| BHCP117-19     | Inorganic Chemistry Lab-II                                |             |                                      | 2019-20                     |                           |         |
| BHCP118-19     | Physical Chemistry Lab-I                                  |             |                                      | 2019-20                     |                           |         |
| UC-BSHP-125-19 | Physics Lab-II  |             |                                      | 2019-20                     |                           |         |
| BHCL201-19     | Organic Chemistry-II (Chemistry of Functional Groups- II) |             |                                      | 2019-20                     |                           |         |
| BHCL202-19     | Physical Chemistry-II (Chemical Thermodynamics)           |             |                                      | 2019-20                     |                           |         |
| BHCL203-19     | Spectroscopy  |             |                                      | 2019-20                     |                           |         |
| UC-BSHP-214-19 | Physics-III (Elements of Modern Physics)                  |             |                                      | 2019-20                     |                           |         |
| BHCL205-19     | Environmental Science                                     |             |                                      | 2019-20                     |                           |         |


  
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|       |                           |   |  |         |
|-------|---------------------------|---|--|---------|
|       | BHCP206-19                | Organic Chemistry Lab-II (Functional group Transformations and their Identifications) | 2019-20  |         |
|       | BHCP207-19                | Physical Chemistry Lab-II   | 2019-20  |         |
|       | UC-BSHP-215-19            | Physics Lab-III (Elements of modern physics lab)                                      | 2019-20  |         |
|       | BHCL211-19                | Inorganic Chemistry-III (Crystal field theory and transition elements)                | 2019-20  |         |
|       | BHCL212-19                | Physical Chemistry-III (Phase Equilibria and Chemical Kinetics)                       | 2019-20  |         |
|       | UC-BSHM-408-19            | Maths-III (Matrices & Ordinary differential equations)                                | 2019-20  |         |
|       | BHCL216-19                | Basic Analytical Chemistry  | 2019-20  |         |
|       | BHCP217-19                | Inorganic Chemistry Lab-III   | 2019-20  |         |
|       | BHCP218-19                | Physical Chemistry Lab-III  | 2019-20  |         |
|       | BHCP219-19                | Basic Analytical Chemistry Lab  | 2019-20  |         |
|       | BHCL213-19                | Green Chemistry   | 2019-20  |         |
|       | BHCL214-19                | Polymer Chemistry   | 2019-20  |         |
|       | BHCL301-19                | Inorganic Chemistry-IV (Organometallic Chemistry)                                     | 2019-20  |         |
|       | BHCL302-19                | Organic Chemistry-III (Heterocyclic Chemistry)  | 2019-20  |         |
|       | BHCL303-19                | Quantum Chemistry   | 2019-20  |         |
|       | BHCL306-19                | Ligand Field Theory   | 2019-20  |         |
|       | BHCP307-19                | Inorganic Chemistry Lab-IV  | 2019-20  |         |
|       | BHCP308-19                | Organic Chemistry Lab-III   | 2019-20  |         |
|       | BHCL304-19                | Analytical Clinical Biochemistry  | 2019-20  |         |
|       | BHCL305-19                | Industrial Chemicals and Environment  | 2019-20  |         |
|       | BHCL311-19                | Organic Chemistry-IV (Natural Products and Biochemistry)                              | 2019-20  |         |
|       | BHCL312-19                | Physical Chemistry-IV (Electrochemistry)  | 2019-20  |         |
|       | BHCP318-19                | Organic Chemistry Lab-IV  | 2019-20  |         |
|       | BHCP319-19                | Physical Chemistry Lab-IV   | 2019-20  |         |
|       | BHCL313-19                | Catalysis   | 2019-20  |         |
|       | BHCL314-19                | Analytical Methods in Chemistry   | 2019-20  |         |
|       | BHCL315-19                | Nanochemistry   | 2019-20  |         |
|       | BHCL316-19                | Molecular Modelling and Drug Design   | 2019-20  |         |
| 25001 | PhD Environmental Science | PHAS - 901  | Research Methodology   | 2019-20 |
|       |                           | RPE   | Research and Publication Ethics  | 2019-21 |
|       |                           |   | Recent Advances in Environmental Science   | 2019-22 |
|       |                           |   | Soil and Environment   | 2019-23 |
|       |                           |   | Disaster Management  | 2019-24 |
|       |                           | ESI 964   | Laboratory Practice and Safety   | 2019-25 |
|       | MSc Environmental Science | MEVS101   | Fundamentals of Environment Science  | 2022-23 |
|       |                           | MEVS102   | Ecology and Ecosystem Dynamics   | 2022-23 |
|       |                           | MEVS103   | Earth Processes and Natural Hazards  | 2022-23 |
|       |                           | MEVS104   | Energy and Environment   | 2022-23 |
|       |                           | MEVS105   | Biodiversity Conservation and Natural resource Management  | 2022-23 |
|       |                           | MEVS106   | Agriculture and Sustainability   | 2022-23 |
|       |                           | MEVS107   | Lab Course-I (Ecology and Ecosystem Dynamics)  | 2022-23 |
|       |                           | MEVS108   | Lab Course-II (Biodiversity Conservation and Natural resource Management)                          | 2022-23 |
|       |                           | MEVS201   | Environment Monitoring and Pollution control   | 2022-23 |
|       |                           | MEVS202   | Solid and Hazardous Waste Management   | 2022-23 |
|       |                           | MEVS 203  | Environment Chemistry and Toxicology   | 2022-23 |
|       |                           | MEVS204   | Analytical Techniques and Instrumentation  | 2022-23 |
|       |                           | MEVS501   | Aquatic Environment  | 2022-23 |
|       |                           | MEVS502   | Laboratory Safety  | 2022-23 |
|       |                           | MEVS P 205  | Lab Course-I (Environment Chemistry & Toxicology and Environment Monitoring and Pollution control) | 2022-23 |
|       |                           | MEVS 206  | Lab Course-II (Analytical Techniques & Instrumentation)  | 2022-23 |

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|          |  |         |
|----------|--|---------|
| MEVS 207 | *Industrial Visit/ Field Trip                | 2022-23 |
| MEVS301  | Chmatology and Meteorology                   | 2022-23 |
| MEVS 302 | Environment Management Plan EIA and Auditing | 2022-23 |
| MEVS 303 | Remote Sensing and GIS                       | 2022-23 |
| MEVS 304 | Hydrology and Water Resources                | 2022-23 |
| MEVS503  | Environment Toxicology and Bioremediation    | 2022-23 |
| MEVS504  | Natural Disaster Management                  | 2022-23 |
| MEVS305  | Lab Course-I (EIA and Auditing)              | 2022-23 |
| MEVS306  | Dissertation and Seminar                     | 2022-23 |
| MEVS 401 | Environment Laws, Ethics and policies        | 2022-23 |
| MEVS505  | Environment Biotechnology                    | 2022-23 |
| MEVS506  | Watershed management                         | 2022-23 |
| MEVS402  | Dissertation                                 | 2022-23 |

|   |         |
|---|---------|
| Year  | 2023-24 |
| Number of courses having focus on employability | 126     |
| Number of courses in all programmes             | 126     |
| Percentage per year                             | 100     |

  
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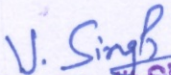
Department of Physical Sciences

3.1 List of courses offered across all programs during last five years

| Program Code       | Program Name  | Course Code | Course Name  | Year of offering the course |
|--------------------|---------------|-------------|--|-----------------------------|
| 11001              | Ph.D          | PHS900      | Research Methodology   | 2023-24                     |
| 11001              | Ph.D          | PHS901      | Theoretical methods in Physics   | 2023-24                     |
| 11001              | Ph.D          | PHS902      | Techniques in Experimental Physics   | 2023-24                     |
| 11001              | Ph.D          | PHS903      | Advanced Condensed Matter Physics  | 2023-24                     |
| 11001              | Ph.D          | PHS904      | Computational Physics  | 2023-24                     |
| 11001              | Ph.D          | PHS905      | Nano Materials   | 2023-24                     |
| 11001              | Ph.D          | PHS906      | Adavanced Nuclear Physics  | 2023-24                     |
| 205                | M.Sc. Physics | MSPH411-21  | Mathematical Physics-1   | 2023-24                     |
| 205                | M.Sc. Physics | MSPH412-21  | Classical Mechanics  | 2023-24                     |
| 205                | M.Sc. Physics | MSPH413-21  | Quantum Mechanics-1  | 2023-24                     |
| 205                | M.Sc. Physics | MSPH414-21  | Electronics  | 2023-24                     |
| 205                | M.Sc. Physics | MSPH415-21  | Computational Physics  | 2023-24                     |
| 205                | M.Sc. Physics | MSPH416-21  | Electronics Lab  | 2023-24                     |
| 205                | M.Sc. Physics | MSPH417-21  | Computational Physics Lab-1  | 2023-24                     |
| 205                | M.Sc. Physics | MSPH421-21  | Mathematical Physics-II  | 2023-24                     |
| 205                | M.Sc. Physics | MSPH422-21  | Statistical Mechanics  | 2023-24                     |
| 205                | M.Sc. Physics | MSPH423-21  | Quantum Mechanics-II   | 2023-24                     |
| 205                | M.Sc. Physics | MSPH424-21  | Classical Electrodynamics  | 2023-24                     |
| 205                | M.Sc. Physics | MSPH425-21  | Atomic and Molecular Physics   | 2023-24                     |
| 205                | M.Sc. Physics | MSPH426-21  | Atomic, Nuclear, and Particle Physics Lab                                    | 2023-24                     |
| 205                | M.Sc. Physics | MSPH427-21  | Computational Physics Lab-II   | 2023-24                     |
| 205                | M.Sc. Physics | MSPH531-21  | Condensed Matter Physics   | 2023-24                     |
| 205                | M.Sc. Physics | MSPH532-21  | Nuclear Physics  | 2023-24                     |
| 205                | M.Sc. Physics | MSPH533-21  | Particle Physics   | 2023-24                     |
| 205                | M.Sc. Physics | MSPH534-21  | Elective Subject-I- Fibre optics and non-linear optics                       | 2023-24                     |
| 205                | M.Sc. Physics | MSPH535-21  | Elective Subject-I-Radiation Physics   | 2023-24                     |
| 205                | M.Sc. Physics | MSPH536-21  | Elective Subject-I-Nonlinear Dynamics  | 2023-24                     |
| 205                | M.Sc. Physics | MSPH537-21  | Elective Subject-II-Plasma Physics   | 2023-24                     |
| 205                | M.Sc. Physics | MSPH538-21  | Elective Subject-II-Structures, Spectra and Properties of Biomolecules       | 2023-24                     |
| 205                | M.Sc. Physics | MSPH539-21  | Elective Subject-II-Science of Renewable Source of Energy                    | 2023-24                     |
| 205                | M.Sc. Physics | MSPH540-21  | Condensed Matter Physics Lab   | 2023-24                     |
| 205                | M.Sc. Physics | MSPH541-21  | Elective Subject-III-Physics of Nanomaterials                                | 2023-24                     |
| 205                | M.Sc. Physics | MSPH542-21  | Elective Subject-III-Experimental Techniques in Nuclear and Particle Physics | 2023-24                     |
| 205                | M.Sc. Physics | MSPH543-21  | Elective Subject-III-Superconductivity and Low Temperature Physics           | 2023-24                     |
| 205                | M.Sc. Physics | MSPH544-21  | Elective Subject-IV-Advanced Condensed Matter Physics                        | 2023-24                     |
| 205                | M.Sc. Physics | MSPH545-21  | Elective Subject-IV-Advanced Particle Physics                                | 2023-24                     |
| 205                | M.Sc. Physics | MSPH546-21  | Elective Subject-IV-Environment Physics                                      | 2023-24                     |
| 205                | M.Sc. Physics | MSPH547-21  | Dissertation   | 2023-24                     |
| B.Sc. Hons Physics | BSHP-111-21   |             | Optics   | 2023-24                     |
| B.Sc. Hons Physics | BSHP-112-21   |             | Mechanics  | 2023-24                     |
| B.Sc. Hons Physics | BSHP-113-21   |             | Physics Lab-I  | 2023-24                     |
| B.Sc. Hons Physics | BSHP-121-21   |             | Waves and Vibrations   | 2023-24                     |
| B.Sc. Hons Physics | BSHP-122-21   |             | Electricity and Magnetism  | 2023-24                     |
| B.Sc. Hons Physics | BSHP-123-21   |             | Physics Lab-II   | 2023-24                     |

V. Singh  
 Dr. Varinderjit Singh  
 Assistant Professor  
 Department of Physics  
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| Program Code | Program Name       | Course Code | Course Name                            | Year of offering the course |
|--------------|--------------------|-------------|--|-----------------------------|
|              | B.Sc. Hons Physics | BSHP-211-21 | Mathematical Physics-I                 | 2023-24                     |
|              | B.Sc. Hons Physics | BSHP-212-21 | Elements of Modern Physics             | 2023-24                     |
|              | B.Sc. Hons Physics | BSHP-213-21 | Physics Lab-III                        | 2023-24                     |
|              | B.Sc. Hons Physics | BSHP-214-21 | Analog Systems and Application         | 2023-24                     |
|              | B.Sc. Hons Physics | BSHP-215-21 | Physics Lab-IV                         | 2023-24                     |
|              | B.Sc. Hons Physics | BSHP-221-21 | Mathematical Physics-II                | 2023-24                     |
|              | B.Sc. Hons Physics | BSHP-221-21 | Thermal Physics                        | 2023-24                     |
|              | B.Sc. Hons Physics | BSHP-223-21 | Physics Lab-V                          | 2023-24                     |
|              | B.Sc. Hons Physics | BSHP-224-21 | Digital Electronics                    | 2023-24                     |
|              | B.Sc. Hons Physics | BSHP-225-21 | Physics Lab-VI                         | 2023-24                     |
|              | B.Sc. Hons Physics | BSHP-226-21 | Electrical Circuits and Network Skills | 2023-24                     |
|              | B.Sc. Hons Physics | BSHP-227-21 | Basic Instrumentation Skills           | 2023-24                     |
|              | B.Sc. Hons Physics | BSHP-228-21 | Scientific Word Processing             | 2023-24                     |
|              | B.Sc. Hons Physics | BSHP-311-21 | Quantum Mechanics                      | 2023-24                     |
|              | B.Sc. Hons Physics | BSHP-312-21 | Solid State Physics                    | 2023-24                     |
|              | B.Sc. Hons Physics | BSHP-313-21 | Physics Lab-VII                        | 2023-24                     |
|              | B.Sc. Hons Physics | BSHP-314-21 | Computational Physics Lab-1            | 2023-24                     |
|              | B.Sc. Hons Physics | BSHP-315-21 | Atomic and Molecular Physics           | 2023-24                     |
|              | B.Sc. Hons Physics | BSHP-316-21 | Nuclear Physics                        | 2023-24                     |
|              | B.Sc. Hons Physics | BSHP-317-21 | Dissertation                           | 2023-24                     |
|              | B.Sc. Hons Physics | BSHP-318-21 | Communication Electronics              | 2023-24                     |
|              | B.Sc. Hons Physics | BSHP-319-21 | Renewable Energy and Energy Harvesting | 2023-24                     |
|              | B.Sc. Hons Physics | BSHP-321-21 | Electromagnetic Theory                 | 2023-24                     |
|              | B.Sc. Hons Physics | BSHP-322-21 | Statistical Mechanics                  | 2023-24                     |
|              | B.Sc. Hons Physics | BSHP-323-21 | Physics Lab-VIII                       | 2023-24                     |
|              | B.Sc. Hons Physics | BSHP-324-21 | Particle Physics                       | 2023-24                     |
|              | B.Sc. Hons Physics | BSHP-325-21 | Advanced Mathematical Physics          | 2023-24                     |
|              | B.Sc. Hons Physics | BSHP-326-21 | Advanced Condensed Matter Physics      | 2023-24                     |
|              | B.Sc. Hons Physics | BSHP-327-21 | Experimental Techniques                | 2023-24                     |
|              | B.Sc. Hons Physics | BSHP-328-21 | Radiation Safety                       | 2023-24                     |

  
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 Assistant Professor  
 Department of Physics  
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3.1 List of courses offered across all programs during the Year 2023-24

| Program code | Program name | Course code                      | Course name   | Year of offering the course |
|--------------|--------------|----------------------------------|---|-----------------------------|
| 206          | M.Sc (Maths) | MSM-101-22                       | Algebra-I   | 2016 Onwards                |
|              |              | MSM-102-22                       | Real Analysis-I                                       |                             |
|              |              | MSM-103-22                       | Complex Analysis                                      |                             |
|              |              | MSM-104-22                       | Ordinary Differential Equations and Special Functions |                             |
|              |              | MSM-105-22                       | Mathematical Methods                                  |                             |
|              |              | MSM-106-18                       | Introduction to Computer Algebra System (Lab)         |                             |
|              |              | MSM-201-22                       | Real Analysis   |                             |
|              |              | MSM-202-22                       | Real Analysis-II                                      |                             |
|              |              | MSM-203-22                       | Mechanics-I   |                             |
|              |              | MSM-204-22                       | Partial Differential Equations                        |                             |
|              |              | MSM-205-22                       | Numerical Analysis                                    |                             |
|              |              | MSM-206-22                       | Numerical Analysis (Lab)                              |                             |
|              |              | Topology                         | MSM-301-22  |                             |
|              |              | Number Theory and Cryptography   | MSM-302-22  |                             |
|              |              | Mathematical Statistics          | MSM-303-22  |                             |
|              |              | Functional Analysis              | MSM-304-22  |                             |
|              |              | Tensor Calculus and Applications | MSM-305-22  |                             |
|              |              | Operation Research               | MSM-401-22  |                             |
|              |              | Elective-I                       | MSM-XXX-22  |                             |
|              |              | Elective-II                      | MSM-XXX-22  |                             |
| Elective-III | MSM-XXX-22   |                                  |   |                             |
| Elective-IV  | MSM-XXX-22   |                                  |   |                             |
|              |              | BSHM-101-22                      | Calculus -I   |                             |
|              |              | BSHM-102-22                      | Algebra   |                             |
|              |              | BSHM-103-22                      | Programming Lab-I                                     |                             |
|              |              | BSHM-201-22                      | Real Analysis   |                             |
|              |              | BSHM-202-22                      | Differential equation                                 |                             |
|              |              | BSHM-203-22                      | Programming Lab - II                                  |                             |



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|               |                              |             |  |              |          |                               |              |
|---------------|------------------------------|-------------|--|--------------|----------|-------------------------------|--------------|
| 512           | B.Sc. Hons.<br>(Mathematics) | BSHM-301-22 | Theory of Real Functions                     | 2019 Onwards |          |                               |              |
|               |                              | BSHM-302-22 | Group Theory I                               |              |          |                               |              |
|               |                              | BSHM-303-22 | Multivariable Calculus                       |              |          |                               |              |
|               |                              | BSHM-304-22 | Logic and Sets                               |              |          |                               |              |
|               |                              | BSHM-401-22 | Numerical Methods                            |              |          |                               |              |
|               |                              | BSHM-402-22 | Riemann Integration and Series of Functions  |              |          |                               |              |
|               |                              | BSHM-403-22 | Ring Theory and Linear Algebra I             |              |          |                               |              |
|               |                              | BSHM-404-22 | Programming Lab-III                          |              |          |                               |              |
|               |                              | BSHM-405-22 | Graph Theory                                 |              |          |                               |              |
|               |                              | BSHM-501-22 | Partial Differential Equations               |              |          |                               |              |
|               |                              | BSHM-502-22 | Group Theory-II                              |              |          |                               |              |
|               |                              | BSHM-503-22 | Introduction to Number Theory                |              |          |                               |              |
|               |                              | BSHM-504-22 | Mathematical Statistics                      |              |          |                               |              |
|               |                              | BSHM-505-22 | Programming Lab-IV                           |              |          |                               |              |
|               |                              | BSHM-506-22 | Computer Algebra System and Related Software |              |          |                               |              |
|               |                              | BSHM-601-22 | Complex Analysis                             |              |          |                               |              |
|               |                              | BSHM-602-22 | Ring Theory and Linear Algebra-II            |              |          |                               |              |
|               |                              | BSHM-603-22 | Theory of Equations                          |              |          |                               |              |
|               |                              | BSHM-604-22 | Mathematical Modeling                        |              |          |                               |              |
|               |                              | BSHM-605-22 | Programming Lab-V                            |              |          |                               |              |
|               |                              | BSHM-606-22 | Scientific Documentation Tool                |              |          |                               |              |
|               |                              | 95          | Ph.D(Mathematics)                            |              | MPHM-101 | Research Methodology          | 2016 Onwards |
|               |                              |             |  |              | MPHM-102 | Method in Applied Mathematics |              |
|               |                              |             |  |              | MPHM-103 | Continum Mechanics            |              |
| MPHM-104      | Advanced Analysis            |             |  |              |          |                               |              |
| UC-MSM-504-18 | Advance Number theory        |             |  |              |          |                               |              |
| UC-MSM-510-18 | Advance Numerical methods    |             |  |              |          |                               |              |

Number of Courses offered across all programs during last five years

|        |         |
|--------|---------|
| Year   | 2022-23 |
| Number | 55      |



Head  
Department of Mathematical Sciences  
I.K. Gujral Punjab Technical University  
Kapurthala-144603 Pb. (India)

## 3.1 List of courses offered across all programs during year 2023-24

| Program cod | Program name | Course code  | Course name                                    | Year of offering the course |
|-------------|--------------|--------------|--|-----------------------------|
| 14          | B.TECH       | BTCE-701     | (a) Software Training* (b) Industrial Training | 2021-22                     |
| 14          | B.TECH       | BTCE-801     | Design of Steel Structures-II                  | 2021-22                     |
| 14          | B.TECH       | BTCE-802     | Disaster Management                            | 2021-22                     |
| 14          | B.TECH       | BTCE-803     | Irrigation Engineering-II                      | 2021-22                     |
| 14          | B.TECH       | BTCE-804     | Transportation Engineering-II                  | 2021-22                     |
| 14          | B.TECH       | BTCE-XXX     | Elective -I *                                  | 2021-22                     |
| 14          | B.TECH       | BTCE-YYY     | Elective -II *                                 | 2021-22                     |
| 14          | B.TECH       | BTPHXX-18    | Physics  | 2021-22                     |
| 14          | B.TECH       | BTPHXX-18    | Physics (Lab)                                  | 2021-22                     |
| 14          | B.TECH       | BTAMXX-18    | Maths-I  | 2021-22                     |
| 14          | B.TECH       | BTEE101-18   | Basic Electrical Engineering                   | 2021-22                     |
| 14          | B.TECH       | BTEE102-18   | Basic Electrical Engineering (Lab)             | 2021-22                     |
| 14          | B.TECH       | BTME101-18   | Engineering Graphics & Design                  | 2021-22                     |
| 14          | B.TECH       | BTCH101-18   | Chemistry-I                                    | 2021-22                     |
| 14          | B.TECH       | BTCH102-18   | Chemistry-I (Lab)                              | 2021-22                     |
| 14          | B.TECH       | BTAMXX-18    | Maths-II                                       | 2021-22                     |
| 14          | B.TECH       | BTPS101-18   | Programming for Problem Solving                | 2021-22                     |
| 14          | B.TECH       | BTPS102-18   | Programming for Problem Solving (Lab)          | 2021-22                     |
| 14          | B.TECH       | BTMP101-18   | Workshop / Manufacturing Practices             | 2021-22                     |
| 14          | B.TECH       | BTHU101-18   | English  | 2021-22                     |
| 14          | B.TECH       | BTHU102-18   | English (Lab)                                  | 2021-22                     |
| 14          | B.Tech       | BTCE- 301-18 | Surveying & Geomatics                          | 2021-22                     |

|    |        |              |  |         |
|----|--------|--------------|--|---------|
| 14 | B.Tech | BTCE- 302-18 | Solid Mechanics <sup>#</sup>                                       | 2021-22 |
| 14 | B.Tech | BTCE- 303-18 | Fluid Mechanics <sup>#</sup>                                       | 2021-22 |
| 14 | B.Tech | BTAM- 301-18 | Mathematics III <sup>#</sup><br>(Transform & Discrete Mathematics) | 2021-22 |
| 14 | B.Tech | BTEC- 305-18 | Basic Electronics & applications in Civil Engineering              | 2021-22 |
| 14 | B.Tech | HSMC- 132-18 | Civil Engineering- Introduction, Societal & Global Impact          | 2021-22 |
| 14 | B.Tech | BTCE- 306-18 | Surveying & Geomatics Lab  | 2021-22 |
| 14 | B.Tech | BTCE- 307-18 | Fluid Mechanics Lab  | 2021-22 |
| 14 | B.Tech | BTCE- 308-18 | Solid Mechanics Lab  | 2021-22 |
| 14 | B.Tech | BMPD- 301-18 | Mentoring and Professional Development                             | 2021-22 |
| 14 | B.Tech | BTCE- 332-18 | Training – I*  | 2021-22 |
| 14 | B.Tech | BTCE- 401-18 | Concrete Technology  | 2021-22 |
| 14 | B.Tech | BTCE- 402-18 | Material, Testing & Evaluation                                     | 2021-22 |
| 14 | B.Tech | BTCE- 403-18 | Hydrology & Water Resources  | 2021-22 |
| 14 | B.Tech | BTCE- 404-18 | Transportation Engineering   | 2021-22 |
| 14 | B.Tech | BTCE- 405-18 | Disaster Preparedness & Planning                                   | 2021-22 |
| 14 | B.Tech | EVS- 101-18  | Environment Science (Non-credit)                                   | 2021-22 |
| 14 | B.Tech | BTCE- 406-18 | Concrete Testing Lab   | 2021-22 |
| 14 | B.Tech | BTCE- 407-18 | Transportation Lab   | 2021-22 |
| 14 | B.Tech | BTCE-432-18  | Training –II*  | 2021-22 |

|                               |                |                |   |         |
|-------------------------------|----------------|----------------|---|---------|
| 14                            | B.Tech         | BMPD- 401-18   | Mentoring and Professional Development      | 2021-22 |
| 14                            | B.Tech         | BTCE- 501-18   | Engineering Geology                         | 2021-22 |
| 14                            | B.Tech         | BTCE- 502-18   | Elements of Earthquake Engineering          | 2021-22 |
| 14                            | B.Tech         | BTCE- 503-18   | Construction Engineering & Management       | 2021-22 |
| 14                            | B.Tech         | BTCE- 504-18   | Environmental Engineering                   | 2021-22 |
| 14                            | B.Tech         | BTCE- 505-18   | Structural Engineering                      | 2021-22 |
| 14                            | B.Tech         | BTCE- 506-18   | Geotechnical Engineering <sup>#</sup>       | 2021-22 |
| 14                            | B.Tech         | BTCE- 507-18   | Geotechnical Lab                            | 2021-22 |
| 14                            | B.Tech         | BTCE- 508-18   | Environmental Engineering Lab               | 2021-22 |
| 14                            | B.Tech         | BTCE-          | Structural Lab                              | 2021-22 |
| 14                            | B.Tech         | 509-18         |   | 2021-22 |
| 14                            | B.Tech         | BMPD- 501-18   | Mentoring and                               | 2021-22 |
| 14                            | B.Tech         |                | Professional                                | 2021-22 |
| 14                            | B.Tech         | BTCE- 532-18   | Training – II*                              | 2021-22 |
| 14                            | B.Tech         | BTCE- 601-18   | Engineering Economics, Estimation & Costing | 2021-22 |
| 14                            | B.Tech         | PECE-602 X-18  | Elective –I                                 | 2021-22 |
| 14                            | B.Tech         | PECE- 603 Y-18 | Elective –II                                | 2021-22 |
| 14                            | B.Tech         | PECE- 604 Z-18 | Elective – III                              | 2021-22 |
| 14                            | B.Tech         | OEZZ- XXX1     | Open Elective-I                             | 2021-22 |
| 14                            | B.Tech         | OEZZ- XXX2     | Open Elective – II                          | 2021-22 |
| 14                            | B.Tech         | BTMC- 101-18   | Constitution of India                       | 2021-22 |
| 14                            | B.Tech         | BMPD- 601-18   | Mentoring and Professional Development      | 2021-22 |
| <b>Year</b>                   | <b>2022-23</b> |                |   |         |
| <b>No. of Courses Offered</b> | <b>63</b>      |                |   |         |

3.1 List of courses offered across all programs during last five years

| Program    | Program name                                     | Course code | Course name                                   |
|------------|--|-------------|---|
| 3001       | PhD(CSE & CA)                                    | 90223       | Research Methodology                          |
|            |  | 90269       | Cloud Computing                               |
|            |  | NA          | Advanced Concepts in Image Processing         |
|            |  | 90222       | Advanced Information Security                 |
|            |  | NA          | Modelling and Simulation                      |
|            |  | 90272       | Data Warehousing and Data Mining              |
|            |  | 90294       | Mobile Computing                              |
|            |  | NA          | Network Security and Cryptography             |
|            |  | 90198       | Advanced Software Engineering                 |
|            |  | NA          | Advanced Computer Architecture                |
|            |  | 90199       | Advanced Database Systems                     |
|            |  | 93352       | Advanced Data Structures & Algorithms         |
|            |  | 90203       | Soft Computing                                |
|            |  | NA          | Advanced Operating Systems                    |
|            |  | NA          | Big Data Analytics                            |
|            |  | 90224       | Presentation                                  |
|            |  | 90221       | Advanced Data Communication                   |
|            |  | 90273       | Internetworking                               |
|            |  | 93353       | Optimization Techniques                       |
|            |  | 90220       | Adhoc Wireless and Sensor Networks            |
|            |  | NA          | Neural Networks and Fuzzy Logic               |
|            |  | NA          | Mathematical Foundations of Computer Networks |
|            |  | 10          | BCA   |
| UGCA1903   | Problem Solving using C                          |             |   |
| UGCA1904   | Workshop on Desktop Publishing                   |             |   |
| UGCA1905   | Problem Solving using C Laboratory               |             |   |
| UGCA1906   | Fundamentals of Computer and IT                  |             |   |
| BMPD102-18 | Mentoring and Professional Development           |             |   |
| UGCA1908   | Computer System Architecture                     |             |   |
| UGCA1909   | Object Oriented Programming using C++            |             |   |
| UGCA1910   | Object Oriented Programming using C++ Laboratory |             |   |
| UGCA1912   | Computer System Architecture Laboratory          |             |   |
| BMPD202-18 | Mentoring and Professional Development           |             |   |
| UGCA1913   | Computer Networks                                |             |   |
| UGCA1914   | Programming in Python                            |             |   |
| UGCA1915   | Data Structures                                  |             |   |
| UGCA1916   | Computer Networks Laboratory                     |             |   |
| UGCA1917   | Programming in Python Laboratory                 |             |   |
| UGCA1918   | Data Structures Laboratory                       |             |   |
| UGCA1919   | PC Assembly & Troubleshooting                    |             |   |
| UGCA1920   | PC Assembly & Troubleshooting Laboratory         |             |   |
| BMPD302-18 | Mentoring and Professional Development           |             |   |
| UGCA1921   | Software Engineering                             |             |   |
| UGCA1922   | Database Management Systems                      |             |   |
| UGCA1923   | Operating Systems                                |             |   |
| UGCA1924   | Software Engineering Laboratory                  |             |   |
| UGCA1925   | Database Management Systems Laboratory           |             |   |
| UGCA1926   | Operating Systems Laboratory                     |             |   |
| UGCA1927   | Web Designing                                    |             |   |

|            |  |             |  |
|------------|--|-------------|--|
| UGCA1928   | Web Designing Laboratory               |             |  |
| BMPD402-18 | Mentoring and Professional Development |             |  |
| UGCA1929   | Programming in PHP                     |             |  |
| UGCA1930   | Programming in PHP Laboratory          |             |  |
| NA         | Minor Project                          |             |  |
| BMPD502-18 | Mentoring and Professional Development |             |  |
| UGCA1943   | Android Programming                    |             |  |
| UGCA1944   | Android Programming Laboratory         |             |  |
| NA         | Major Project                          |             |  |
| BMPD602-18 | Mentoring and Professional Development |             |  |
| UGCA1931   | Data Warehouse and Mining              |             |  |
| UGCA1932   | Programming in Java                    |             |  |
| UGCA1933   | Internet of Things                     |             |  |
| UGCA1934   | Computer Graphics                      |             |  |
| UGCA1935   | Linux Operating System                 |             |  |
| UGCA1936   | Cloud Computing                        |             |  |
| UGCA1937   | Data Warehouse and Mining Laboratory   |             |  |
| UGCA1938   | Programming in Java Laboratory         |             |  |
| UGCA1939   | Internet of Things Laboratory          |             |  |
| UGCA1940   | Computer Graphics Laboratory           |             |  |
| UGCA1941   | Linux Operating System Laboratory      |             |  |
| UGCA1942   | Cloud Computing Laboratory             |             |  |
| UGCA1945   | Artificial Intelligence                |             |  |
| UGCA1946   | R Programming                          |             |  |
| UGCA1947   | Digital Marketing                      |             |  |
| UGCA1948   | Information Security                   |             |  |
| UGCA1949   | Cyber Laws & IPR                       |             |  |
| UGCA1950   | Machine Learning                       |             |  |
| UGCA1951   | Artificial Intelligence Laboratory     |             |  |
| UGCA1952   | R Programming Laboratory               |             |  |
| UGCA1953   | Digital Marketing Laboratory           |             |  |
| UGCA1954   | Information Security Laboratory        |             |  |
| UGCA1955   | Cyber Laws & IPR Laboratory            |             |  |
| 15         | B.Tech CSE                             | BTPS101-18  | Programming for Problem Solving          |
|            |  | BTPS102-18  | Programming for Problem Solving (Lab)    |
|            |  | BTES 301-18 | Digital Electronics                      |
|            |  | BTCS 301-18 | Data structure & Algorithms              |
|            |  | BTES 302-18 | Digital Electronics Lab                  |
|            |  | BTCS 303-18 | Data structure & Algorithms Lab          |
|            |  | BTCS 304-18 | Object Oriented Programming lab          |
|            |  | BTCS 305-18 | IT Workshop*                             |
|            |  | BTCS 401-18 | Discrete Mathematics                     |
|            |  | BTES 401-18 | Computer Organization & Architecture     |
|            |  | BTCS 402-18 | Operating Systems                        |
|            |  | BTCS 403-18 | Design & Analysis of Algorithms          |
|            |  | BTES 402-18 | Computer Organization & Architecture Lab |
|            |  | BTCS 404-18 | Operating Systems Lab                    |
|            |  | BTCS 405-18 | Design & Analysis of Algorithms Lab      |
|            |  | BTES 501-18 | Enterprise Resource Planning             |
|            |  | BTCS 501-18 | Database Management Systems              |
|            |  | BTCS 502-18 | Formal Language & Automata Theory        |

|             |  |
|-------------|--|
| BTCS 503-18 | Software Engineering                   |
| BTCS 504-18 | Computer Networks                      |
| BTCS 505-18 | Database Management Systems Lab        |
| BTCS 506-18 | Software Engineering Lab               |
| BTCS 507-18 | Computer Networks Lab                  |
| BTCS 601-18 | Compiler Design                        |
| BTCS 602-18 | Artificial Intelligence                |
| BTCS 603-18 | Project-1                              |
| BTCS 604-18 | Compiler Design Lab                    |
| BTCS 605-18 | Artificial Intelligence Lab            |
| BTCS 701-18 | Network Security and Cryptography      |
| BTCS 702-18 | Data Mining and Data Warehousing       |
| BTCS 702-18 | Project-II                             |
| BTCS 510-18 | Programming in Python                  |
| BTCS 513-18 | Programming in Python Lab              |
| BTCS 515-18 | Computer Graphics                      |
| BTCS 518-18 | Computer Graphics lab                  |
| BTCS 520-18 | Web Technologies                       |
| BTCS 522-18 | Web Technologies lab                   |
| BTCS 521-18 | Computational Biology                  |
| BTCS 523-18 | Computational Biology lab              |
| BTCS 606-18 | Simulation and Modelling               |
| BTCS 607-18 | Simulation and Modelling Lab           |
| BTCS 608-18 | Internet of Things                     |
| BTCS 609-18 | Internet of Things lab                 |
| BTCS 610-18 | Digital Image processing               |
| BTCS 611-18 | Digital Image processing lab           |
| BTCS 612-18 | Cloud computing                        |
| BTCS 613-18 | Cloud computing lab                    |
| BTCS 614-18 | Software Project Management            |
| BTCS 615-18 | Software Project Management Lab        |
| BTCS 616-18 | Data Science                           |
| BTCS 617-18 | Data Science lab                       |
| BTCS 618-18 | Machine Learning                       |
| BTCS 619-18 | Machine Learning lab                   |
| BTCS 620-18 | Mobile Application Development         |
| BTCS 621-18 | Mobile Application Development lab     |
| BTCS 704-18 | Deep Learning                          |
| BTCS 705-18 | Deep Learning Lab                      |
| BTCS 706-18 | Distributed databases                  |
| BTCS 707-18 | Distributed databases lab              |
| BTCS 708-18 | Computer Vision                        |
| BTCS 709-18 | Computer Vision lab                    |
| BTCS 710-18 | Agile Software Development             |
| BTCS 711-18 | Agile Software Development lab         |
| BTCS 712-18 | Blockchain Technologies                |
| BTCS 713-18 | Blockchain Technologies Lab            |
| BTCS 714-18 | Parallel Computing                     |
| BTCS 715-18 | Parallel Computing lab                 |
| BTCS 716-18 | Adhoc and Wireless sensor networks     |
| BTCS 717-18 | Adhoc and Wireless sensor networks lab |

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|-----|-------------|-------------|---|
|     |             | BTCS 718-18 | Quantum Computing                             |
|     |             | BTCS 719-18 | Quantum Computing lab                         |
| 163 | M.Tech(CSE) | MTCS101-18  | Mathematical foundations of Computer Science  |
|     |             | MTCS102-18  | Advanced Data Structures                      |
|     |             | MTCS105-18  | Machine Learning                              |
|     |             | MTCS106-18  | Wireless Sensor Networks                      |
|     |             | MTCS107-18  | Introduction to Intelligent Systems           |
|     |             | MTCS108-18  | Data Science                                  |
|     |             | MTCS109-18  | Distributed Systems                           |
|     |             | MTCS110-18  | Advanced Wireless and Mobile Networks         |
|     |             | MTRM101-18  | Research Methodology and IPR                  |
|     |             | MTCS103-18  | Advanced Data Structures lab                  |
|     |             | MTCS104-18  | Lab based on electives                        |
|     |             | MTCS 201-18 | Advance Algorithms                            |
|     |             | MTCS 202-18 | Soft Computing                                |
|     |             | MTCS204-18  | Data Preparation and Analysis                 |
|     |             | MTCS205-18  | Secure Software Design & Enterprise Computing |
|     |             | MTCS206-18  | Computer Vision                               |
|     |             | MTCS207-18  | Human and Computer Interaction                |
|     |             | MTCS208-18  | GPU Computing                                 |
|     |             | MTCS209-18  | Digital Forensics                             |
|     |             | MTCS203-18  | Advanced Algorithms lab                       |
|     | M.Tech(CSE) | MTCS101-18  | Mathematical foundations of Computer Science  |
|     |             | MTCS102-18  | Advanced Data Structures                      |
|     |             | MTCS105-18  | Machine Learning                              |
|     |             | MTCS106-18  | Wireless Sensor Networks                      |
|     |             | MTCS107-18  | Introduction to Intelligent Systems           |
|     |             | MTCS108-18  | Data Science                                  |
|     |             | MTCS109-18  | Distributed Systems                           |
|     |             | MTCS110-18  | Advanced Wireless and Mobile Networks         |
|     |             | MTRM101-18  | Research Methodology and IPR                  |
|     |             | MTCS103-18  | Advanced Data Structures lab                  |
|     |             | MTCS104-18  | Lab based on electives                        |
|     |             | MTCS 201-18 | Advance Algorithms                            |
|     |             | MTCS 202-18 | Soft Computing                                |
|     |             | MTCS204-18  | Data Preparation and Analysis                 |
|     |             | MTCS205-18  | Secure Software Design & Enterprise Computing |
|     |             | MTCS206-18  | Computer Vision                               |
|     |             | MTCS207-18  | Human and Computer Interaction                |
|     |             | MTCS208-18  | GPU Computing                                 |
|     |             | MTCS209-18  | Digital Forensics                             |
|     |             | MTCS203-18  | Advanced Algorithms lab                       |
|     | B.Tech CSE  | BTPS101-18  | Programming for Problem Solving               |
|     |             | BTPS102-18  | Programming for Problem Solving (Lab)         |
|     |             | BTES 301-18 | Digital Electronics                           |
|     |             | BTCS 301-18 | Data structure & Algorithms                   |
|     |             | BTES 302-18 | Digital Electronics Lab                       |
|     |             | BTCS 303-18 | Data structure & Algorithms Lab               |
|     |             | BTCS 304-18 | Object Oriented Programming lab               |
|     |             | BTCS 305-18 | IT Workshop*                                  |
|     |             | BTCS 401-18 | Discrete Mathematics                          |



|             |  |
|-------------|--|
| BTES 401-18 | Computer Organization & Architecture     |
| BTCS 402-18 | Operating Systems                        |
| BTCS 403-18 | Design & Analysis of Algorithms          |
| BTES 402-18 | Computer Organization & Architecture Lab |
| BTCS 404-18 | Operating Systems Lab                    |
| BTCS 405-18 | Design & Analysis of Algorithms Lab      |
| BTES 501-18 | Enterprise Resource Planning             |
| BTCS 501-18 | Database Management Systems              |
| BTCS 502-18 | Formal Language & Automata Theory        |
| BTCS 503-18 | Software Engineering                     |
| BTCS 504-18 | Computer Networks                        |
| BTCS 505-18 | Database Management Systems Lab          |
| BTCS 506-18 | Software Engineering Lab                 |
| BTCS 507-18 | Computer Networks Lab                    |
| BTCS 601-18 | Compiler Design                          |
| BTCS 602-18 | Artificial Intelligence                  |
| BTCS 603-18 | Project-1                                |
| BTCS 604-18 | Compiler Design Lab                      |
| BTCS 605-18 | Artificial Intelligence Lab              |
| BTCS 701-18 | Network Security and Cryptography        |
| BTCS 702-18 | Data Mining and Data Warehousing         |
| BTCS 702-18 | Project-II                               |
| BTCS 510-18 | Programming in Python                    |
| BTCS 513-18 | Programming in Python Lab                |
| BTCS 515-18 | Computer Graphics                        |
| BTCS 518-18 | Computer Graphics lab                    |
| BTCS 520-18 | Web Technologies                         |
| BTCS 522-18 | Web Technologies lab                     |
| BTCS 521-18 | Computational Biology                    |
| BTCS 523-18 | Computational Biology lab                |
| BTCS 606-18 | Simulation and Modelling                 |
| BTCS 607-18 | Simulation and Modelling Lab             |
| BTCS 608-18 | Internet of Things                       |
| BTCS 609-18 | Internet of Things lab                   |
| BTCS 610-18 | Digital Image processing                 |
| BTCS 611-18 | Digital Image processing lab             |
| BTCS 612-18 | Cloud computing                          |
| BTCS 613-18 | Cloud computing lab                      |
| BTCS 614-18 | Software Project Management              |
| BTCS 615-18 | Software Project Management Lab          |
| BTCS 616-18 | Data Science                             |
| BTCS 617-18 | Data Science lab                         |
| BTCS 618-18 | Machine Learning                         |
| BTCS 619-18 | Machine Learning lab                     |
| BTCS 620-18 | Mobile Application Development           |
| BTCS 621-18 | Mobile Application Development lab       |
| BTCS 704-18 | Deep Learning                            |
| BTCS 705-18 | Deep Learning Lab                        |
| BTCS 706-18 | Distributed databases                    |
| BTCS 707-18 | Distributed databases lab                |
| BTCS 708-18 | Computer Vision                          |

|  |     |             |  |
|--|-----|-------------|--|
|  |     | BTCS 709-18 | Computer Vision lab                              |
|  |     | BTCS 710-18 | Agile Software Development                       |
|  |     | BTCS 711-18 | Agile Software Development lab                   |
|  |     | BTCS 712-18 | Blockchain Technologies                          |
|  |     | BTCS 713-18 | Blockchain Technologies Lab                      |
|  |     | BTCS 714-18 | Parallel Computing                               |
|  |     | BTCS 715-18 | Parallel Computing lab                           |
|  |     | BTCS 716-18 | Adhoc and Wireless sensor networks               |
|  |     | BTCS 717-18 | Adhoc and Wireless sensor networks lab           |
|  |     | BTCS 718-18 | Quantum Computing                                |
|  |     | BTCS 719-18 | Quantum Computing lab                            |
|  | BCA | UGCA1902    | Fundamentals of Computer and IT                  |
|  |     | UGCA1903    | Problem Solving using C                          |
|  |     | UGCA1904    | Workshop on Desktop Publishing                   |
|  |     | UGCA1905    | Problem Solving using C Laboratory               |
|  |     | UGCA1906    | Fundamentals of Computer and IT                  |
|  |     | BMPD102-18  | Mentoring and Professional Development           |
|  |     | UGCA1908    | Computer System Architecture                     |
|  |     | UGCA1909    | Object Oriented Programming using C++            |
|  |     | UGCA1910    | Object Oriented Programming using C++ Laboratory |
|  |     | UGCA1912    | Computer System Architecture Laboratory          |
|  |     | BMPD202-18  | Mentoring and Professional Development           |
|  |     | UGCA1913    | Computer Networks                                |
|  |     | UGCA1914    | Programming in Python                            |
|  |     | UGCA1915    | Data Structures                                  |
|  |     | UGCA1916    | Computer Networks Laboratory                     |
|  |     | UGCA1917    | Programming in Python Laboratory                 |
|  |     | UGCA1918    | Data Structures Laboratory                       |
|  |     | UGCA1919    | PC Assembly & Troubleshooting                    |
|  |     | UGCA1920    | PC Assembly & Troubleshooting Laboratory         |
|  |     | BMPD302-18  | Mentoring and Professional Development           |
|  |     | UGCA1921    | Software Engineering                             |
|  |     | UGCA1922    | Database Management Systems                      |
|  |     | UGCA1923    | Operating Systems                                |
|  |     | UGCA1924    | Software Engineering Laboratory                  |
|  |     | UGCA1925    | Database Management Systems Laboratory           |
|  |     | UGCA1926    | Operating Systems Laboratory                     |
|  |     | UGCA1927    | Web Designing                                    |
|  |     | UGCA1928    | Web Designing Laboratory                         |
|  |     | BMPD402-18  | Mentoring and Professional Development           |
|  |     | UGCA1929    | Programming in PHP                               |
|  |     | UGCA1930    | Programming in PHP Laboratory                    |
|  |     | NA          | Minor Project                                    |
|  |     | BMPD502-18  | Mentoring and Professional Development           |
|  |     | UGCA1943    | Android Programming                              |
|  |     | UGCA1944    | Android Programming Laboratory                   |
|  |     | NA          | Major Project                                    |
|  |     | BMPD602-18  | Mentoring and Professional Development           |
|  |     | UGCA1931    | Data Warehouse and Mining                        |
|  |     | UGCA1932    | Programming in Java                              |
|  |     | UGCA1933    | Internet of Things                               |

|          |                                      |   |
|----------|--------------------------------------|---|
| UGCA1934 | Computer Graphics                    |   |
| UGCA1935 | Linux Operating System               |   |
| UGCA1936 | Cloud Computing                      |   |
| UGCA1937 | Data Warehouse and Mining Laboratory |   |
| UGCA1938 | Programming in Java Laboratory       |   |
| UGCA1939 | Internet of Things Laboratory        |   |
| UGCA1940 | Computer Graphics Laboratory         |   |
| UGCA1941 | Linux Operating System Laboratory    |   |
| UGCA1942 | Cloud Computing Laboratory           |   |
| UGCA1945 | Artificial Intelligence              |   |
| UGCA1946 | R Programming                        |   |
| UGCA1947 | Digital Marketing                    |   |
| UGCA1948 | Information Security                 |   |
| UGCA1949 | Cyber Laws & IPR                     |   |
| UGCA1950 | Machine Learning                     |   |
| UGCA1951 | Artificial Intelligence Laboratory   |   |
| UGCA1952 | R Programming Laboratory             |   |
| UGCA1953 | Digital Marketing Laboratory         |   |
| UGCA1954 | Information Security Laboratory      |   |
| UGCA1955 | Cyber Laws & IPR Laboratory          |   |
| MCA      | PGCA-B1                              | Computer Programming using C                        |
|          | PGCA-B2                              | Computer Science Essentials                         |
|          | PGCA1917                             | Discrete Structures & Optimization                  |
|          | PGCA1951                             | Programming in Python                               |
|          | PGCA1952                             | Advanced Data Structures                            |
|          | PGCA1953                             | Advanced Database Management System                 |
|          | PGCA1905                             | Technical Communication                             |
|          | PGCA1954                             | Data Structures using Python Laboratory             |
|          | PGCA1955                             | Advanced Database Management System Laboratory      |
|          | PGCA1908                             | Technical Communication Laboratory                  |
|          | PGCA1909                             | Web Technologies                                    |
|          | PGCA1920                             | Design & Analysis of Algorithms                     |
|          | PGCA1918                             | Advanced Java                                       |
|          | PGCA1956                             | Linux Administration                                |
|          | PGCA1932                             | Information Security & Cyber Law                    |
|          | PGCA1914                             | Web Technologies Laboratory                         |
|          | PGCA1922                             | Advanced Java Laboratory                            |
|          | PGCA1957                             | Linux Administration Laboratory                     |
|          | PGCA1925                             | Advanced Computer Networking                        |
|          | PGCA1926                             | Artificial Intelligence & Soft Computing            |
|          | PGCA1927                             | Theory of Computation                               |
|          | PGCA1928                             | Advanced Computer Networking Laboratory             |
|          | PGCA1929                             | Artificial Intelligence & Soft Computing Laboratory |
|          | PGCA1969                             | *Summer/Institutional Training                      |
|          | PGCA1930                             | Software Project Management                         |
|          | PGCA1971                             | Optimization Techniques                             |
|          | PGCA1972                             | Data Mining and Business Intelligence               |
|          | PGCA1973                             | Enterprise Resource Planning                        |
|          | PGCA1933                             | Mobile Applications Development                     |
|          | PGCA1935                             | Simulation & Modelling                              |
|          | PGCA1921                             | e-Commerce and Digital Marketing                    |

|  |                     |         |           |
|--|---------------------|---------|-----------|
|  | Sahil Preet         | 2323378 | 17/7/2023 |
|  | Sandhya             | 2323380 | 28/8/2023 |
|  | Sapna Kumari        | 2323381 | 26/8/2023 |
|  | Sameer Shahi        | 2323379 | 5/9/2023  |
|  | Shivam Kumar Mahto  | 2323383 | 14/9/2023 |
|  | Shivam Maurya       | 2323384 | 25/7/2023 |
|  | Shubham             | 2323385 | 25/7/2023 |
|  | Shubham             | 2323386 | 28/8/2023 |
|  | Siddharth Kumar     | 2323387 | 15/9/2023 |
|  | Simrat Singh Chadha | 2323388 | 24/8/2023 |
|  | Sonia               | 2323389 | 28/8/2023 |
|  | Sunny Kumar         | 2323390 | 28/8/2023 |
|  | Tarlok Singh        | 2323391 | 25/7/2023 |
|  | Tushar Dhunna       | 2323392 | 24/8/2023 |
|  | Upinder Kaur        | 2323393 | 15/9/2023 |
|  | Vansh Sahni         | 2323394 | 6/9/2023  |
|  | Vikash Kumar        | 2323395 | 5/9/2023  |
|  | Vikram Singh        | 2323396 | 28/8/2023 |
|  | Yash Dhir           | 2323397 | 14/9/2023 |
|  | Yogesh Prasad       | 2323398 | 28/8/2023 |
|  | Yuvraj Singh        | 2323399 | 25/7/2023 |
|  | Sharandeep Kaur     | 2323382 | 17/7/2023 |

| Number of students enrolled year wise during the last f |         |         |
|---|---------|---------|
| Year  | 2019-20 | 2020-21 |
| Number  | 305     | 515     |

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Head of Department  
Computer Sc. & Engineering  
IKGPTU, Kapurthala-144603

Department of Mechanical Engineering

| Program code | Program name | Course code | Course name                            | Year of offering the course |
|--------------|--------------|-------------|--|-----------------------------|
| 30           | B.TECH (ME)  | BTME301-18  | Fluid Mechanics                        | 2022-2023                   |
| 30           | B.TECH (ME)  | BTME302-18  | Theory of Machines-1                   | 2022-2023                   |
| 30           | B.TECH (ME)  | BTME303-18  | Machine Drawing                        | 2022-2023                   |
| 30           | B.TECH (ME)  | BTME304-18  | Strength of Materials-I                | 2022-2023                   |
| 30           | B.TECH (ME)  | BTME305-18  | Basic Electronics Engineering          | 2022-2023                   |
| 30           | B.TECH (ME)  | BTME306-18  | Strength of Material Lab               | 2022-2023                   |
| 30           | B.TECH (ME)  | BTME307-18  | Theory of Machines (Lab)               | 2022-2023                   |
| 30           | B.TECH (ME)  | BTME308-18  | Fluid Mechanics (Lab)                  | 2022-2023                   |
| 30           | B.TECH (ME)  | BMPD301-18  | Mentoring and Professional Development | 2022-2023                   |
| 30           | B.TECH (ME)  | BTME401-18  | Applied Thermodynamics                 | 2022-2023                   |
| 30           | B.TECH (ME)  | BTME402-18  | Fluid Machines                         | 2022-2023                   |
| 30           | B.TECH (ME)  | BTME403-18  | Strength of Materials - II             | 2022-2023                   |
| 30           | B.TECH (ME)  | BTME404-18  | Materials Engineering                  | 2022-2023                   |
| 30           | B.TECH (ME)  | BTME405-18  | Theory of Machines - II                | 2022-2023                   |
| 30           | B.TECH (ME)  | EVS101-18   | Environmental Science                  | 2022-2023                   |
| 30           | B.TECH (ME)  | BTME406-18  | Applied Thermodynamics (Lab)           | 2022-2023                   |
| 30           | B.TECH (ME)  | BTME407-18  | Fluid Machines (Lab)                   | 2022-2023                   |
| 30           | B.TECH (ME)  | BTME408-18  | Material Engineering                   | 2022-2023                   |
| 30           | B.TECH (ME)  | BMPD401-18  | Mentoring and Professional Development | 2022-2023                   |
| 30           | B.TECH (ME)  | BTME501-18  | Heat Transfer                          | 2022-2023                   |
| 30           | B.TECH (ME)  | BTME502-18  | Design of Machine Element              | 2022-2023                   |
| 30           | B.TECH (ME)  | BTME503-18  | Manufacturing Process                  | 2022-2023                   |
| 30           | B.TECH (ME)  | BTME504-18  | Management and Engineering Economics   | 2022-2023                   |
| 30           | B.TECH (ME)  | BMPD505-18  | Heat Transfer (Lab)                    | 2022-2023                   |
| 30           | B.TECH (ME)  | BTME506-18  | Manufacturing Process (Lab)            | 2022-2023                   |
| 30           | B.TECH (ME)  | BTME507-18  | Numerical Methods (Lab)                | 2022-2023                   |
| 30           | B.TECH (ME)  | BTMC102-18  | Essence of Indian knowledge Tradition  | 2022-2023                   |
| 30           | B.TECH (ME)  | BTME409-18  | 4- weeks Industrial Training           | 2022-2023                   |
| 30           | B.TECH (ME)  | BTME601-18  | Refrigeration and Air conditioning     | 2022-2023                   |
| 30           | B.TECH (ME)  | BTME602-18  | Mechanical Measurements & metrology    | 2022-2023                   |
| 30           | B.TECH (ME)  | BTME603-18  | Automobile Engineering                 | 2022-2023                   |
| 30           | B.TECH (ME)  | BTME604-18  | Introduction to Industrial management  | 2022-2023                   |
| 30           | B.TECH (ME)  | BTME605-18  | Refrigeration and Air conditioning     | 2022-2023                   |
| 30           | B.TECH (ME)  | BTME606-18  | Mechanical Measurements & metrology    | 2022-2023                   |

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**Head**  
 Department of Mechanical Engineering  
 J.K. Guiral Punjab Technical University  
 (Main Campus) Kapurthala

|     |  |            |  |           |
|-----|--|------------|--|-----------|
| 30  | B.TECH (ME)  | BTME607-18 | Auto. Engg. (Lab)                        | 2022-2023 |
| 30  | B.TECH (ME)  | BTME608-18 | Minor Project                            | 2022-2023 |
| 30  | B.TECH (ME)  | BTME609-18 | Internal Combustion Engines              | 2022-2023 |
| 30  | B.TECH (ME)  | BTME610-18 | Mechatronics Systems                     | 2022-2023 |
| 30  | B.TECH (ME)  | BTME611-18 | Microprocessor in Automation             | 2022-2023 |
| 30  | B.TECH (ME)  | BTME612-18 | Composite Materials                      | 2022-2023 |
| 30  | B.TECH (ME)  | BTME613-18 | Computer Aided Design                    | 2022-2023 |
| 30  | B.TECH (ME)  | BTME614-18 | Product Design and Development           | 2022-2023 |
| 30  | B.TECH (ME)  | BTME615-18 | Non- Conventional Energy Resources       | 2022-2023 |
| 30  | B.TECH (ME)  | BTME616-18 | Operational Research                     | 2022-2023 |
| 30  | B.TECH (ME)  | BTME617-18 | Maintenance and Reliability              | 2022-2023 |
| 30  | B.TECH (ME)  | BTME701-18 | Mechanical Vibrations                    | 2022-2023 |
| 30  | B.TECH (ME)  | BTME702-18 | Automation in Manufacturing              | 2022-2023 |
| 30  | B.TECH (ME)  | BTME703-18 | Fundamentals of Management for Engineers | 2022-2023 |
| 30  | B.TECH (ME)  | BTME704-18 | Project- II                              | 2022-2023 |
| 30  | B.TECH (ME)  | BTME801    | Software Training                        | 2022-2023 |
| 30  | B.TECH (ME)  | BTME801    | Industrial Training                      | 2022-2023 |
| 663 | M.TECH (Manufacturing engineering and Automation ) | MTME-101   | Advanced Engineering Materials           | 2022-2023 |
| 663 | M.TECH (Manufacturing engineering and Automation ) | MTME-102   | Modern Manufacturing Processes           | 2022-2023 |
| 663 | M.TECH (Manufacturing engineering and Automation ) | MTME-103   | Advanced Casting Processes               | 2022-2023 |
| 663 | M.TECH (Manufacturing engineering and Automation ) | MTME-104   | Operations Management                    | 2022-2023 |
| 663 | M.TECH (Manufacturing engineering and Automation ) | MTME-105   | Metal Forming                            | 2022-2023 |
| 663 | M.TECH (Manufacturing engineering and Automation ) | MTME-201   | Research methodology                     | 2022-2023 |
| 663 | M.TECH (Manufacturing engineering and Automation ) | MTME-202   | Advance Welding Technology               | 2022-2023 |
| 663 | M.TECH (Manufacturing engineering and Automation ) | MTME-203   | Corrosion Science                        | 2022-2023 |

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Head  
Department of Mechanical Engineering  
I.K. Gujral Punjab Technical University  
(Main Campus) Kapurthala

|     |  |           |   |           |
|-----|--|-----------|---|-----------|
| 663 | M.TECH (Manufacturing engineering and Automation ) | MTME-204  | Advanced material Characterization Techniques | 2022-2023 |
| 663 | M.TECH (Manufacturing engineering and Automation ) | MTME-XXX  | Elective - I                                  | 2022-2023 |
| 663 | M.TECH (Manufacturing engineering and Automation ) | MTME-301  | Industrial Automation                         | 2022-2023 |
| 663 | M.TECH (Manufacturing engineering and Automation ) | MTME-YYY  | Elective - II                                 | 2022-2023 |
| 663 | M.TECH (Manufacturing engineering and Automation ) | MTME-ZZZ  | Elective - III                                | 2022-2023 |
| 663 | M.TECH (Manufacturing engineering and Automation ) | MTME-302  | Mechatronics and IoT Lab                      | 2022-2023 |
| 663 | M.TECH (Manufacturing engineering and Automation ) | MTME-303  | Thesis (Dissertation Part-I)                  | 2022-2023 |
| 663 | M.TECH (Manufacturing engineering and Automation ) | MTME-304  | Seminar                                       | 2022-2023 |
| 663 | M.TECH (Manufacturing engineering and Automation ) | MTME-401  | Thesis (Dissertation Part-II)                 | 2022-2023 |
| 663 | M.TECH (Manufacturing engineering and Automation ) | MTME -205 | Tribology                                     | 2022-2023 |
| 663 | M.TECH (Manufacturing engineering and Automation ) | MTME -206 | Industrial Robotics                           | 2022-2023 |
| 663 | M.TECH (Manufacturing engineering and Automation ) | MTME -207 | Plastics Engineering                          | 2022-2023 |
| 663 | M.TECH (Manufacturing engineering and Automation ) | MTME -208 | Rapid Prototyping                             | 2022-2023 |
| 663 | M.TECH (Manufacturing engineering and Automation ) | MTME -209 | Advanced Metal Cutting                        | 2022-2023 |
| 663 | M.TECH (Manufacturing engineering and Automation ) | MTME -210 | Computer Aided Design & Manufacturing         | 2022-2023 |
| 663 | M.TECH (Manufacturing engineering and Automation ) | MTME -211 | Maintenance and Reliability Engineering       | 2022-2023 |

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| 663 | M.TECH (Manufacturing engineering and Automation ) | MTME -212 | Supply Chain Management                           | 2022-2023 |
| 663 | M.TECH (Manufacturing engineering and Automation ) | MTME -213 | Production Planning and Control                   | 2022-2023 |
| 663 | M.TECH (Manufacturing engineering and Automation ) | MTME -214 | Product Design and Development                    | 2022-2023 |
| 663 | M.TECH (Manufacturing engineering and Automation ) | MTME -215 | Entrepreneurship                                  | 2022-2023 |
| 663 | M.TECH (Manufacturing engineering and Automation ) | MTME -216 | Work System Design and Development                | 2022-2023 |
| 663 | M.TECH (Manufacturing engineering and Automation ) | MTME -217 | Metrology & Industrial Inspection                 | 2022-2023 |
| 663 | M.TECH (Manufacturing engineering and Automation ) | MTME -218 | Finite Element Analysis                           | 2022-2023 |
| 663 | M.TECH (Manufacturing engineering and Automation ) | MTME -219 | Low cost Automation                               | 2022-2023 |
| 102 | PhD  | PhD-101   | Research Methodology                              | 2022-2023 |
| 102 | PhD  | PhD-102   | Advanced Heat Transfer                            | 2022-2023 |
| 102 | PhD  | PhD-103   | Non Conventional Machining                        | 2022-2023 |
| 102 | PhD  | PhD-104   | Advanced Fluid Mechanics and CFD                  | 2022-2023 |
| 102 | PhD  | PhD-105   | Finite Element Methods                            | 2022-2023 |
| 102 | PhD  | PhD-106   | Composite Materials                               | 2022-2023 |
| 102 | PhD  | PhD-107   | Optimization Techniques                           | 2022-2023 |
| 102 | PhD  | PhD-108   | Computer Aided Design and Manufacturing (CAD/CAM) | 2022-2023 |
| 102 | PhD  | PhD-109   | Advanced Theory of Vibrations                     | 2022-2023 |
| 102 | PhD  | PhD-201   | Tribology   | 2022-2023 |
| 102 | PhD  | PhD-202   | Thermo Economics and Power Plants                 | 2022-2023 |
| 102 | PhD  | PhD-203   | Advanced Thermodynamics                           | 2022-2023 |
| 102 | PhD  | PhD-204   | Presentation/Seminar                              | 2022-2023 |
| 102 | PhD  | PhD-205   | Production Engineering                            | 2022-2023 |
| 102 | PhD  | PhD-206   | Advanced Mechanics of Solids                      | 2022-2023 |
| 102 | PhD  | PhD-207   | Mechatronics                                      | 2022-2023 |
| 102 | PhD  | PhD-208   | Product Design and Development                    | 2022-2023 |



3.1 List of courses offered across all programs for the session 2023-24 (I.e from 01-07-2023 to 30-06-2024)

Department of Electrical Engineering

| Sr. No | Program Code | Program Name | Course Code  | Course Name   | Year of offering the Course |
|--------|--------------|--------------|--------------|---|-----------------------------|
| 1      | 16           | B.Tech       | BTPH102-18   | Optics and Modern Physics                                   | 2023-24                     |
| 2      | 16           | B.Tech       | BTPH112-18   | Optics and Modern Physics Lab                               | 2023-24                     |
| 3      | 16           | B.Tech       | BTAM101-18   | Mathematics-I (Calculus & Linear Algebra)                   | 2023-24                     |
| 4      | 16           | B.Tech       | BTEE101-18   | Basic Electrical Engineering                                | 2023-24                     |
| 5      | 16           | B.Tech       | BTEE102-18   | Basic Electrical Engineering (Lab)                          | 2023-24                     |
| 6      | 16           | B.Tech       | BTME101-18   | Engineering Graphics & Design                               | 2023-24                     |
| 7      | 16           | B.Tech       | BMPD101-18   | Mentoring and Professional Development                      | 2023-24                     |
| 8      | 16           | B.Tech       | BTCH101-18   | Chemistry-I   | 2023-24                     |
| 9      | 16           | B.Tech       | BTCH102-18   | Chemistry-I (Lab)   | 2023-24                     |
| 10     | 16           | B.Tech       | BTAM101-18   | Mathematics-I (Calculus & Linear Algebra)                   | 2023-24                     |
| 11     | 16           | B.Tech       | BTPS101-18   | Programming for Problem Solving                             | 2023-24                     |
| 12     | 16           | B.Tech       | BTPS102-18   | Programming for Problem Solving (Lab)                       | 2023-24                     |
| 13     | 16           | B.Tech       | BTMP101-18   | Workshop / Manufacturing Practices                          | 2023-24                     |
| 14     | 16           | B.Tech       | BTHU101-18   | English   | 2023-24                     |
| 15     | 16           | B.Tech       | BTHU102-18   | English (Lab)   | 2023-24                     |
| 16     | 16           | B.Tech       | BMPD101-18   | Mentoring and Professional Development                      | 2023-24                     |
| 17     | 16           | B.Tech       | BTCH101-18   | Chemistry-I   | 2023-24                     |
| 18     | 16           | B.Tech       | BTCH102-18   | Chemistry-I (Lab)   | 2023-24                     |
| 19     | 16           | B.Tech       | BTAM202-18   | Mathematics-II (Differential Equations & Numerical Methods) | 2023-24                     |
| 20     | 16           | B.Tech       | BTPS101-18   | Programming for Problem Solving                             | 2023-24                     |
| 21     | 16           | B.Tech       | BTPS102-18   | Programming for Problem Solving (Lab)                       | 2023-24                     |
| 22     | 16           | B.Tech       | BTMP101-18   | Workshop / Manufacturing Practices                          | 2023-24                     |
| 23     | 16           | B.Tech       | BTHU101-18   | English   | 2023-24                     |
| 24     | 16           | B.Tech       | BTHU102-18   | English (Lab)   | 2023-24                     |
| 25     | 16           | B.Tech       | BMPD201-18   | Mentoring and Professional Development                      | 2023-24                     |
| 26     | 16           | B.Tech       | BTPH102-18   | Optics and Modern Physics                                   | 2023-24                     |
| 27     | 16           | B.Tech       | BTPH112-18   | Optics and Modern Physics Lab                               | 2023-24                     |
| 28     | 16           | B.Tech       | BTAM202-18   | Mathematics-II (Differential Equations & Numerical Methods) | 2023-24                     |
| 29     | 16           | B.Tech       | BTEE101-18   | Basic Electrical Engineering                                | 2023-24                     |
| 30     | 16           | B.Tech       | BTEE102-18   | Basic Electrical Engineering (Lab)                          | 2023-24                     |
| 31     | 16           | B.Tech       | BTME101-18   | Engineering Graphics & Design                               | 2023-24                     |
| 32     | 16           | B.Tech       | BMPD201-18   | Mentoring and Professional Development                      | 2023-24                     |
| 33     | 16           | B.Tech       | BTEE- 301-18 | Electrical Circuit Analysis                                 | 2023-24                     |

|    |    |        |              |  |         |
|----|----|--------|--------------|--|---------|
| 34 | 16 | B.Tech | BTEE- 302-18 | Analog Electronics                                 | 2023-24 |
| 35 | 16 | B.Tech | BTEE- 303-18 | Electrical Machines – I                            | 2023-24 |
| 36 | 16 | B.Tech | BTEE- 304-18 | Electromagnetic Fields                             | 2023-24 |
| 37 | 16 | B.Tech | BTEE- 305-18 | Engineering Mechanics                              | 2023-24 |
| 38 | 16 | B.Tech | BTEE- 311-18 | Analog Electronics Laboratory                      | 2023-24 |
| 39 | 16 | B.Tech | BTEE- 312-18 | Electrical Machines – I Laboratory                 | 2023-24 |
| 40 | 16 | B.Tech | BTMC-101-18  | Indian Constitution                                | 2023-24 |
| 41 | 16 | B.Tech | BMPD-301-18  | Mentoring and Professional Development of Students | 2023-24 |
| 42 | 16 | B.Tech | BTEE-321-18  | Institutional Summer Vacation Training*            | 2023-24 |
| 43 | 16 | B.Tech | BTEE- 401-18 | Digital Electronics                                | 2023-24 |
| 44 | 16 | B.Tech | BTEE- 402-18 | Electrical Machines – II                           | 2023-24 |
| 45 | 16 | B.Tech | BTEE- 403-18 | Power Electronics                                  | 2023-24 |
| 46 | 16 | B.Tech | BTEE- 404-18 | Signals and Systems                                | 2023-24 |
| 47 | 16 | B.Tech | BTAM-302-18  | Mathematics-III (Probability & Statistics)         | 2023-24 |
| 48 | 16 | B.Tech | BTEE- 411-18 | Measurements and Instrumentation Lab.              | 2023-24 |
| 49 | 16 | B.Tech | BTEE- 412-18 | Digital Electronics Laboratory                     | 2023-24 |
| 50 | 16 | B.Tech | BTEE- 413-18 | Electrical Machines – II Laboratory                | 2023-24 |
| 51 | 16 | B.Tech | BTEE- 414-18 | Power Electronics Laboratory                       | 2023-24 |
| 52 | 16 | B.Tech | BTMC-102-18  | Essence of Indian Traditional Knowledge            | 2023-24 |
| 53 | 16 | B.Tech | BMPD-401-18  | Mentoring and Professional Development of Students | 2023-24 |
| 54 | 16 | B.Tech | BTEE- 501-18 | Power Systems – I (Apparatus & Modeling)           | 2023-24 |
| 55 | 16 | B.Tech | BTEE- 502-18 | Control Systems                                    | 2023-24 |
| 56 | 16 | B.Tech | BTEE- 503-18 | Microprocessors                                    | 2023-24 |
| 57 | 16 | B.Tech | BTEE-504A-18 | Electrical Engineering Materials                   | 2023-24 |
| 58 | 16 | B.Tech | BTEE-504B-18 | Switchgear and Protection                          | 2023-24 |
| 59 | 16 | B.Tech | BTEE-504C-18 | Electrical Machine Design                          | 2023-24 |
| 60 | 16 | B.Tech | BTEE-504D-18 | Renewable Energy Sources                           | 2023-24 |
| 61 | 16 | B.Tech | EVS-101-18   | Environmental Studies                              | 2023-24 |
| 62 | 16 | B.Tech | BTEE- 511-18 | Power Systems-I Laboratory                         | 2023-24 |
| 63 | 16 | B.Tech | BTEE- 512-18 | Control Systems Laboratory                         | 2023-24 |
| 64 | 16 | B.Tech | BTEE- 513-18 | Microprocessors Laboratory                         | 2023-24 |
| 65 | 16 | B.Tech | BTEE- 521-18 | Summer Industry Internship                         | 2023-24 |
| 66 | 16 | B.Tech | BMPD-501-18  | Mentoring and Professional Development of Students | 2023-24 |
| 67 | 16 | B.Tech | BTEE- 601-18 | Power System-II (Operation and Control)            | 2023-24 |
| 68 | 16 | B.Tech | BTEE- 602-18 | Power Generation and Economics                     | 2023-24 |
| 69 | 16 | B.Tech | BTEE-603A-18 | Electromagnetic Waves                              | 2023-24 |
| 70 | 16 | B.Tech | BTEE-603B-18 | Power System Dynamics and Control                  | 2023-24 |
| 71 | 16 | B.Tech | BTEE-603C-18 | Electrical Drives                                  | 2023-24 |
| 72 | 16 | B.Tech | BTEE-603D-18 | Wind and Solar Energy Systems                      | 2023-24 |
| 73 | 16 | B.Tech | BTEE-604A-18 | High Voltage Engineering                           | 2023-24 |

|     |    |        |                |  |         |
|-----|----|--------|----------------|--|---------|
| 74  | 16 | B.Tech | BTEE-604B-18   | Power System Reliability                           | 2023-24 |
| 75  | 16 | B.Tech | BTEE-604C-18   | Line-Commutated and Active PWM Rectifiers          | 2023-24 |
| 76  | 16 | B.Tech | BTEE-604D-18   | Energy Efficient Systems                           | 2023-24 |
| 77  | 16 | B.Tech | OEE-201-18     | Electric Machines                                  | 2023-24 |
| 78  | 16 | B.Tech | OEE-202-18     | Industrial Electrical Systems                      | 2023-24 |
| 79  | 16 | B.Tech | OEE-203-18     | Wind and Solar Energy Systems                      | 2023-24 |
| 80  | 16 | B.Tech | OEE-204-18     | Power Systems                                      | 2023-24 |
| 81  | 16 | B.Tech | BTEE- 611-18   | Electronic Design Laboratory                       | 2023-24 |
| 82  | 16 | B.Tech | BTEE-612-18    | Power Systems-II Laboratory                        | 2023-24 |
| 83  | 16 | B.Tech | BTEE-621-18    | Project-1  | 2023-24 |
| 84  | 16 | B.Tech | BMPD-601-18    | Mentoring and Professional Development of Students | 2023-24 |
| 85  | 16 | B.Tech | BTEE-701A-18   | Electrical Energy Conservation & Auditing          | 2023-24 |
| 86  | 16 | B.Tech | BTEE-701B-18   | Computer Aided Power System Analysis               | 2023-24 |
| 87  | 16 | B.Tech | BTEE-701C-18   | Power Quality and FACTS                            | 2023-24 |
| 88  | 16 | B.Tech | BTEE-701D-18   | Electrical and Hybrid Vehicles                     | 2023-24 |
| 89  | 16 | B.Tech | BTEE-702A-18   | Computational Electromagnetics                     | 2023-24 |
| 90  | 16 | B.Tech | BTEE-702B-18   | Microcontroller and PLC                            | 2023-24 |
| 91  | 16 | B.Tech | BTEE-702C-18   | Control Systems Design                             | 2023-24 |
| 92  | 16 | B.Tech | BTEE-702A-18   | Computational Electromagnetics                     | 2023-24 |
| 93  | 16 | B.Tech | BTEE-702D-18   | Distributed Generation                             | 2023-24 |
| 94  | 16 | B.Tech | BTEE-703A-18   | Industrial Electrical Systems                      | 2023-24 |
| 95  | 16 | B.Tech | BTEE-703B-18   | Restructured Power Systems                         | 2023-24 |
| 96  | 16 | B.Tech | BTEE-703C-18   | Advanced Electric Drives                           | 2023-24 |
| 97  | 16 | B.Tech | BTEE-703D-18   | Energy Storage System                              | 2023-24 |
| 98  | 16 | B.Tech | BTEE-702D-18   | Distributed Generation                             | 2023-24 |
| 99  | 16 | B.Tech | OEE-101-18     | Control Systems                                    | 2023-24 |
| 100 | 16 | B.Tech | OEE-102-18     | Power Electronics                                  | 2023-24 |
| 101 | 16 | B.Tech | OEE-103-18     | Electrical Energy Conservation & Auditing          | 2023-24 |
| 102 | 16 | B.Tech | OEE-104-18     | Renewable Energy Sources                           | 2023-24 |
| 103 | 16 | B.Tech | HSMC103-18     | Education, Technology and Society                  | 2023-24 |
| 104 | 16 | B.Tech | HSMC104-18     | History of Science and Technology in India         | 2023-24 |
| 105 | 16 | B.Tech | HSMC113-18     | Values and Ethics                                  | 2023-24 |
| 106 | 16 | B.Tech | HSMC118-18     | Introduction to Women's and Gender Studies         | 2023-24 |
| 107 | 16 | B.Tech | HSMC124-18     | Sanskrit Bhasa                                     | 2023-24 |
| 108 | 16 | B.Tech | HSMC (MME-303) | Law and Engineering                                | 2023-24 |
| 109 | 16 | B.Tech | BTEE- 721-18   | Project-2  | 2023-24 |
| 110 | 16 | B.Tech | BMPD-701-18    | Mentoring and Professional Development of Students | 2023-24 |
| 111 | 16 | B.Tech | BTEE- 801-18   | Smart Grids  | 2023-24 |
| 112 | 16 | B.Tech | BTEE- 802-18   | Artificial Intelligence Techniques                 | 2023-24 |
| 113 | 16 | B.Tech | BTEE- 803-18   | Indian Electricity Standards and Practices         | 2023-24 |

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|-----|-----|---------------|--------------|--|---------|
| 114 | 16  | B.Tech        | BTEE- 811-18 | Modeling and Simulation Lab                        | 2023-24 |
| 115 | 16  | B.Tech        | BTEE- 812-18 | Technical Report Writing and Presentation          | 2023-24 |
| 116 | 16  | B.Tech        | BMPD-801-18  | Mentoring and Professional Development of Students | 2023-24 |
| 117 | 379 | M.Tech (PSRE) | PSRE-101/21  | Computer Aided Power System Analysis               | 2023-24 |
| 118 | 379 | M.Tech (PSRE) | PSRE-102/21  | Distributed Generation                             | 2023-24 |
| 119 | 379 | M.Tech (PSRE) | PSRE-103A/21 | FACTS and custom Power Devices                     | 2023-24 |
| 120 | 379 | M.Tech (PSRE) | PSRE-103B/21 | Advanced Power System Protection                   | 2023-24 |
| 121 | 379 | M.Tech (PSRE) | PSRE-103C/21 | Mathematical Methods for Power Engineering         | 2023-24 |
| 122 | 379 | M.Tech (PSRE) | PSRE-103D/21 | Analysis of Power Converter                        | 2023-24 |
| 123 | 379 | M.Tech (PSRE) | PSRE-104A/21 | Solar PV Energy System                             | 2023-24 |
| 124 | 379 | M.Tech (PSRE) | PSRE-104B/21 | Waste to Energy Conversion Technologies            | 2023-24 |
| 125 | 379 | M.Tech (PSRE) | PSRE-104C/21 | Small Hydro and Non-Conventional Technologies      | 2023-24 |
| 126 | 379 | M.Tech (PSRE) | PSRE-104D/21 | Solar Energy Conversion Technologies               | 2023-24 |
| 127 | 379 | M.Tech (PSRE) | MTRM-101/21  | Research Methodology and IPR                       | 2023-24 |
| 128 | 379 | M.Tech (PSRE) | PSRE-105/21  | Computer Aided Power System Analysis Lab           | 2023-24 |
| 129 | 379 | M.Tech (PSRE) | PSRE-106/21  | Power Simulation Lab-I                             | 2023-24 |
| 130 | 379 | M.Tech (PSRE) | MTA-101/21   | English for Research Paper Writing                 | 2023-24 |
| 131 | 379 | M.Tech (PSRE) | MTA-102/21   | Disaster Management                                | 2023-24 |
| 132 | 379 | M.Tech (PSRE) | MTA-103//21  | Sanskrit for Technical Knowledge                   | 2023-24 |
| 133 | 379 | M.Tech (PSRE) | MTA-104/21   | Value Education                                    | 2023-24 |
| 134 | 379 | M.Tech (PSRE) | PSRE-103A/21 | FACTS and custom Power Devices                     | 2023-24 |
| 135 | 379 | M.Tech (PSRE) | PSRE-103B/21 | Advanced Power System Protection                   | 2023-24 |
| 136 | 379 | M.Tech (PSRE) | PSRE-103C/21 | Mathematical Methods for Power Engineering         | 2023-24 |
| 137 | 379 | M.Tech (PSRE) | PSRE-103D/21 | Analysis of Power Converter                        | 2023-24 |
| 138 | 379 | M.Tech (PSRE) | PSRE-104A/21 | Solar PV Energy System                             | 2023-24 |
| 139 | 379 | M.Tech (PSRE) | PSRE-104B/21 | Waste to Energy Conversion Technologies            | 2023-24 |
| 140 | 379 | M.Tech (PSRE) | PSRE-104C/21 | Small Hydro and Non-Conventional Technologies      | 2023-24 |
| 141 | 379 | M.Tech (PSRE) | PSRE-104D/21 | Solar Energy Conversion Technologies               | 2023-24 |
| 142 | 379 | M.Tech (PSRE) | MTA-101/21   | English for Research Paper Writing                 | 2023-24 |
| 143 | 379 | M.Tech (PSRE) | MTA-102/21   | Disaster Management                                | 2023-24 |
| 144 | 379 | M.Tech (PSRE) | MTA-103//21  | Sanskrit for Technical Knowledge                   | 2023-24 |
| 145 | 379 | M.Tech (PSRE) | MTA-104/21   | Value Education                                    | 2023-24 |
| 146 | 379 | M.Tech (PSRE) | PSRE-201/21  | Energy Forecasting and Modelling                   | 2023-24 |
| 147 | 379 | M.Tech (PSRE) | PSRE-202/21  | Power System Generation Control                    | 2023-24 |

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| 148 | 379 | M.Tech (PSRE) | PSRE-203A/21 | Power Quality and and Harmonic Analysis                   | 2023-24 |
| 149 | 379 | M.Tech (PSRE) | PSRE-203B/21 | Power System Dynamics                                     | 2023-24 |
| 150 | 379 | M.Tech (PSRE) | PSRE-203C/21 | Reliability Analysis and Protection                       | 2023-24 |
| 151 | 379 | M.Tech (PSRE) | PSRE-203D/21 | Energy Economics and Policies                             | 2023-24 |
| 152 | 379 | M.Tech (PSRE) | PSRE-204A/21 | Electric and Hybrid Vehicles                              | 2023-24 |
| 153 | 379 | M.Tech (PSRE) | PSRE-204B/21 | Smart Grids   | 2023-24 |
| 154 | 379 | M.Tech (PSRE) | PSRE-204C/21 | Engineering Optimization                                  | 2023-24 |
| 155 | 379 | M.Tech (PSRE) | PSRE-204D/21 | Artificial Intelligence Techniques                        | 2023-24 |
| 156 | 379 | M.Tech (PSRE) | MTPR-101/21  | Mini Project with Seminar                                 | 2023-24 |
| 157 | 379 | M.Tech (PSRE) | PSRE-205/21  | Power Simulation Lab-II                                   | 2023-24 |
| 158 | 379 | M.Tech (PSRE) | PSRE-206/21  | Renewable Energy Lab                                      | 2023-24 |
| 159 | 379 | M.Tech (PSRE) | MTA-105/21   | Constitution of India                                     | 2023-24 |
| 160 | 379 | M.Tech (PSRE) | MTA-106/21   | Pedagogy Studies  | 2023-24 |
| 161 | 379 | M.Tech (PSRE) | MTA-107/21   | Stress Management of Yoga                                 | 2023-24 |
| 162 | 379 | M.Tech (PSRE) | MTA-108/21   | Personality Development through Life Enlightenment Skills | 2023-24 |
| 163 | 379 | M.Tech (PSRE) | PSRE-203A/21 | Power Quality and Harmonic Analysis                       | 2023-24 |
| 164 | 379 | M.Tech (PSRE) | PSRE-203B/21 | Power System Dynamics                                     | 2023-24 |
| 165 | 379 | M.Tech (PSRE) | PSRE-203C/21 | Reliability Analysis and Protection                       | 2023-24 |
| 166 | 379 | M.Tech (PSRE) | PSRE-203D/21 | Energy Economics and Policies                             | 2023-24 |
| 167 | 379 | M.Tech (PSRE) | PSRE-204A/21 | Electric and Hybrid Vehicles                              | 2023-24 |
| 168 | 379 | M.Tech (PSRE) | PSRE-204B/21 | Smart Grids   | 2023-24 |
| 169 | 379 | M.Tech (PSRE) | PSRE-204C/21 | Engineering Optimization                                  | 2023-24 |
| 170 | 379 | M.Tech (PSRE) | PSRE-204D/21 | Artificial Intelligence Techniques                        | 2023-24 |
| 171 | 379 | M.Tech (PSRE) | MTA-105/21   | Constitution of India                                     | 2023-24 |
| 172 | 379 | M.Tech (PSRE) | MTA-106/21   | Pedagogy Studies  | 2023-24 |
| 173 | 379 | M.Tech (PSRE) | MTA-107/21   | Stress Management of Yoga                                 | 2023-24 |
| 174 | 379 | M.Tech (PSRE) | MTA-108/21   | Personality Development through Life Enlightenment Skills | 2023-24 |
| 175 | 379 | M.Tech (PSRE) | PSRE-301A/21 | Industrial Load Modelling and Control                     | 2023-24 |
| 176 | 379 | M.Tech (PSRE) | PSRE-301B/21 | Power System Deregulation                                 | 2023-24 |
| 177 | 379 | M.Tech (PSRE) | PSRE-301C/21 | Solar PV Energy System                                    | 2023-24 |
| 178 | 379 | M.Tech (PSRE) | PSRE-301D/21 | Energy Storage System                                     | 2023-24 |
| 179 | 379 | M.Tech (PSRE) | MTOE-301A/21 | Business Analysis   | 2023-24 |
| 180 | 379 | M.Tech (PSRE) | MTOE-301B/21 | Industrial Safety   | 2023-24 |
| 181 | 379 | M.Tech (PSRE) | MTOE-301C/21 | Operations Research                                       | 2023-24 |
| 182 | 379 | M.Tech (PSRE) | MTOE-301D/21 | Cost Management of Engineering Projects                   | 2023-24 |
| 183 | 379 | M.Tech (PSRE) | MTOE-301E/21 | Composite Materials                                       | 2023-24 |
| 184 | 379 | M.Tech (PSRE) | MTOE-301F/21 | Waste to Energy   | 2023-24 |
| 185 | 379 | M.Tech (PSRE) | PSRE- 302/21 | Phase-I Dissertation                                      | 2023-24 |
| 186 | 379 | M.Tech (PSRE) | PSRE-301A/21 | Industrial Load Modelling and Control                     | 2023-24 |
| 187 | 379 | M.Tech (PSRE) | PSRE-301B/21 | Power System Deregulation                                 | 2023-24 |
| 188 | 379 | M.Tech (PSRE) | PSRE-301C/21 | Solar PV Energy System                                    | 2023-24 |
| 189 | 379 | M.Tech (PSRE) | PSRE-301D/21 | Energy Storage System                                     | 2023-24 |
| 190 | 379 | M.Tech (PSRE) | MTOE-301A/21 | Business Analysis   | 2023-24 |
| 191 | 379 | M.Tech (PSRE) | MTOE-301B/21 | Industrial Safety   | 2023-24 |

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| 192 | 379  | M.Tech (PSRE) | MTOE-301C/21 | Operations Research                       | 2023-24 |
| 193 | 379  | M.Tech (PSRE) | MTOE-301D/21 | Cost Management of Engineering Projects   | 2023-24 |
| 194 | 379  | M.Tech (PSRE) | MTOE-301E/21 | Composite Materials                       | 2023-24 |
| 195 | 379  | M.Tech (PSRE) | MTOE-301F/21 | Waste to Energy                           | 2023-24 |
| 196 | 379  | M.Tech (PSRE) | PSRE-401/21  | Phase-II Dissertation                     | 2023-24 |
| 197 | 4001 | Ph.D          | Core         | Research Methodology                      | 2023-24 |
| 198 | 4001 | Ph.D          | Core         | Power System Engineering                  | 2023-24 |
| 199 | 4001 | Ph.D          | Core         | Power Electronics                         | 2023-24 |
| 200 | 4001 | Ph.D          | Core         | Electrical Drives Engineering             | 2023-24 |
| 201 | 4001 | Ph.D          | Core         | Energy Management Engineering             | 2023-24 |
| 202 | 4001 | Ph.D          | Core         | Microelectronics and Control Systems      | 2023-24 |
| 203 | 4001 | Ph.D          | Core         | Advanced Relaying and Protection          | 2023-24 |
| 204 | 4001 | Ph.D          | Core         | Digital System Design                     | 2023-24 |
| 205 | 4001 | Ph.D          | Core         | Modelling and Analysis of Dynamic Systems | 2023-24 |
| 206 | 4001 | Ph.D          | Core         | Bio Medical Signal Processing             | 2023-24 |
| 207 | 4001 | Ph.D          | Core         | Sensors and Applications                  | 2023-24 |
| 208 | 4001 | Ph.D          | Core         | Scientific and Analytical Instrumentation | 2023-24 |
| 209 | 4001 | Ph.D          | Core         | Renewable Energy Resources                | 2023-24 |
| 210 | 4001 | Ph.D          | Core         | Presentation/Seminar                      | 2023-24 |
| 211 | 4001 | Ph.D          | Core         | Signal Processing                         | 2023-24 |
| 212 | 4001 | Ph.D          | Core         | Communication Systems                     | 2023-24 |
| 213 | 4001 | Ph.D          | Core         | VLSI Design and Embedded Systems          | 2023-24 |
| 214 | 4001 | Ph.D          | Core         | Linear Algebra                            | 2023-24 |
| 215 | 4001 | Ph.D          | Core         | Sensors for Ranging and Imaging           | 2023-24 |
| 216 | 4001 | Ph.D          | Core         | Research publication and Ethics           | 2023-24 |

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| Year   | 2023-24 |
| Number | 216     |

  
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 I. K. Gujral Punjab Technical University  
 Kaourthala-144006

3.1 List of courses offered across all programs during last one year

| Program code | Program name                   | Course code     | Course name                                     | Year of offering the course |
|--------------|--------------------------------|-----------------|---|-----------------------------|
| 17           | B.Tech(ECE)                    | BTEC-301-18     | Electronic Devices                              | 2021-22                     |
| 17           | B.Tech(ECE)                    | BTEC-302-18     | Digital System Design                           | 2021-22                     |
| 17           | B.Tech(ECE)                    | BTEC-303-18     | Electromagnetic Waves                           | 2021-22                     |
| 17           | B.Tech(ECE)                    | BTEC-304-18     | Network Theory                                  | 2021-22                     |
| 17           | B.Tech(ECE)                    | BTEC-311-18     | Electronic Devices Laboratory                   | 2021-22                     |
| 17           | B.Tech(ECE)                    | BTEC-312-18     | Digital System Design Laboratory                | 2021-22                     |
| 17           | B.Tech(ECE)                    | BTEC-321-18     | 4-Week Institutional Training                   | 2021-22                     |
| 17           | B.Tech(ECE)                    | BMPD-331-18     | Mentoring and Professional Development          | 2021-22                     |
| 17           | B.Tech(ECE)                    | BTEC-401-18     | Analog Circuits                                 | 2021-22                     |
| 17           | B.Tech(ECE)                    | BTEC-402-18     | Microprocessors and Microcontrollers            | 2021-22                     |
| 17           | B.Tech(ECE)                    | BTEC-403-18     | Signals and Systems                             | 2021-22                     |
| 17           | B.Tech(ECE)                    | BTEC-411-18     | Analog Circuits Laboratory                      | 2021-22                     |
| 17           | B.Tech(ECE)                    | BTEC-412-18     | Microprocessors and Microcontrollers Laboratory | 2021-22                     |
| 17           | B.Tech(ECE)                    | UC-BTEC-501-18  | Analog and Digital Communication                | 2021-22                     |
| 17           | B.Tech(ECE)                    | UC-BTEC-502-18  | Digital Signal Processing                       | 2021-22                     |
| 17           | B.Tech(ECE)                    | UC-BTEC-503-18  | Linear Integrated Circuits                      | 2021-22                     |
| 17           | B.Tech(ECE)                    | UC-BTEC-504-18  | Control Systems                                 | 2021-22                     |
| 17           | B.Tech(ECE)                    | UC-BTEC-901A-18 | AC & DC Motors                                  | 2021-22                     |
| 17           | B.Tech(ECE)                    | UC-BTEC-901C-18 | Satellite Communication                         | 2021-22                     |
| 17           | B.Tech(ECE)                    | UC-BTEC-901F-18 | Java Programming                                | 2021-22                     |
| 17           | B.Tech(ECE)                    | UC-BTEC-511-18  | Analog and Digital Communication Laboratory     | 2021-22                     |
| 17           | B.Tech(ECE)                    | UC-BTEC-512-18  | Digital Signal Processing Laboratory            | 2021-22                     |
| 17           | B.Tech(ECE)                    | UC-BTEC-513-18  | Linear Integrated Circuits Laboratory           | 2021-22                     |
| 17           | B.Tech(ECE)                    | UC-BTEC-601-18  | Wireless Communication                          | 2021-22                     |
| 17           | B.Tech(ECE)                    | BTCS-504-18     | Computer Networks                               | 2021-22                     |
| 17           | B.Tech(ECE)                    | UC-BTEC-602-18  | Optical Fibres & Communication                  | 2021-22                     |
| 17           | B.Tech(ECE)                    | UC-BTEC-603-18  | Microwave and Antenna Engineering               | 2021-22                     |
| 17           | B.Tech(ECE)                    | UC-BTEC-902B-18 | Power Electronics                               | 2021-22                     |
| 17           | B.Tech(ECE)                    | UC-BTEC-902C-18 | Mobile Ad hoc Networks                          | 2021-22                     |
| 17           | B.Tech(ECE)                    | UC-BTEC-902E-18 | Artificial Neural Network                       | 2021-22                     |
| 17           | B.Tech(ECE)                    | UC-BTEC-611-18  | Optical Fibres & Communication Laboratory       | 2021-22                     |
| 17           | B.Tech(ECE)                    | UC-BTEC-612-18  | Microwave and Antenna Engineering Laboratory    | 2021-22                     |
| 17           | B.Tech(ECE)                    | UC-BTEC-631-18  | Project-I                                       | 2021-22                     |
| 17           | B.Tech(ECE)                    | BTEC-907A-18    | Internet of Things (IoT) and Cloud Computing    | 2021-22                     |
| 17           | B.Tech(ECE)                    | BTEC-907C-18    | Robotics and Embedded Systems                   | 2021-22                     |
| 17           | B.Tech(ECE)                    | BTEC-908C-18    | VLSI Design                                     | 2021-22                     |
| 17           | B.Tech(ECE)                    | BTEC-909C-18    | Embedded Systems Design                         | 2021-22                     |
| 17           | B.Tech(ECE)                    | BTEC-909E-18    | Bio Medical Signal Processing                   | 2021-22                     |
| 17           | B.Tech(ECE)                    | BTEC-907B-18    | Antenna Radiating Systems                       | 2021-22                     |
| 17           | B.Tech(ECE)                    | BTEC-908A-18    | Artificial Intelligence                         | 2021-22                     |
| 17           | B.Tech(ECE)                    | BTEC-908B-18    | Wireless Sensor Networks                        | 2021-22                     |
| 17           | B.Tech(ECE)                    | BTEC-909B-18    | Information Theory and Coding                   | 2021-22                     |
| 17           | B.Tech(ECE)                    | BTEC-909D-18    | Artificial Intelligence and Machine Learning    | 2021-22                     |
| 17           | B.Tech(ECE)                    | BTEC-907D-18    | Python Programming                              | 2021-22                     |
| 17           | B.Tech(ECE)                    | BTEC-907E-18    | Adaptive Signal Processing                      | 2021-22                     |
| 17           | B.Tech(ECE)                    | BTEC-908D-18    | Soft Computing                                  | 2021-22                     |
| 17           | B.Tech(ECE)                    | BTEC-909A-18    | Big Data Fundamentals                           | 2021-22                     |
| 17           | B.Tech(ECE)                    | BTEC-908E-18    | Digital Image and Video Processing              | 2021-22                     |
| 17           | B.Tech(ECE)                    | BTEC-731-18     | Project-II                                      | 2021-22                     |
| 378          | M Tech(Wireless Communication) | MTWC-101-18     | Wireless and Mobile Communication               | 2016-17                     |
| 378          | M Tech(Wireless Communication) | MTWC-102-18     | Information Theory and Coding                   | 2016-17                     |
| 378          | M Tech(Wireless Communication) | MTWC-PE1X-18    | Elective I                                      | 2016-17                     |

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 Main Campus, Kapurthala (Punjab), India

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|-----|--------------------------------|---------------|--|---------|
| 378 | M Tech(Wireless Communication) | MTWC-103-18   | Advance Wireless Communication               | 2016-17 |
| 378 | M Tech(Wireless Communication) | MTWC-104-18   | Soft Computing Techniques                    | 2016-17 |
| 378 | M Tech(Wireless Communication) | MTWC-105-18   | Simulation of Wireless Communication Systems | 2016-17 |
| 378 | M Tech(Wireless Communication) | MTWC-PE3X-18  | Elective-III                                 | 2016-17 |
| 378 | M Tech(Wireless Communication) | MTWC-PE4X-18  | Elective-IV                                  | 2016-17 |
| 378 | M Tech(Wireless Communication) | MTWC-113-18   | Wireless Communication Simulation Lab        | 2016-17 |
| 378 | M Tech(Wireless Communication) | MTWC-MP1-18   | Mini Project                                 | 2016-17 |
| 378 | M Tech(Wireless Communication) | MTAXX-18      | Audit Course-II                              | 2016-17 |
| 378 | M Tech(Wireless Communication) | MTWC-PE5X-18  | Elective -V                                  | 2016-17 |
| 378 | M Tech(Wireless Communication) | MTOE-301X-18  | Open Elective                                | 2016-17 |
| 378 | M Tech(Wireless Communication) | MTWC-DS1-18   | Dissertation Phase -I                        | 2016-17 |
| 378 | M Tech(Wireless Communication) | MTWC-DS2-18   | Dissertation Phase -II                       | 2016-17 |
| 101 | PhD(ECE)                       |               | Research Methodology                         | 2016-17 |
| 101 | PhD(ECE)                       |               | Advanced Wireless Communication              | 2016-17 |
| 101 | PhD(ECE)                       |               | Advanced Communication Systems               | 2016-17 |
| 101 | PhD(ECE)                       |               | Advanced Digital Signal processing           | 2016-17 |
| 101 | PhD(ECE)                       |               | Real Time Concepts for Embedded Systems      | 2016-17 |
| 101 | PhD(ECE)                       |               | Radiating systems                            | 2016-17 |
| 101 | PhD(ECE)                       |               | Microwave and Millimeter Wave circuits       | 2016-17 |
| 101 | PhD(ECE)                       |               | RF & Microwave System Design                 | 2016-17 |
| 101 | PhD(ECE)                       |               | Image and Video Processing                   | 2016-17 |
| 101 | PhD(ECE)                       |               | Bio-Medical Signal Processing                | 2016-17 |
| 101 | PhD(ECE)                       |               | MOS Circuit Design                           | 2016-17 |
| 101 | PhD(ECE)                       |               | Low Power VLSI Circuits                      | 2016-17 |
| 101 | PhD(ECE)                       |               | Advanced Data Communication                  | 2016-17 |
| 101 | PhD(ECE)                       |               | Coding Theory and Techniques                 | 2016-17 |
| 101 | PhD(ECE)                       |               | Optical Communication Technology             | 2016-17 |
| 101 | PhD(ECE)                       |               | Optical Networks.                            | 2016-17 |
| 597 | B.Tech AI&ML                   | BTES-301-18   | Digital Electronics                          | 2022-23 |
| 597 | B.Tech AI&ML                   | BTCS-301-18   | Data Structure & Algorithms                  | 2022-23 |
| 597 | B.Tech AI&ML                   | BTCS-302-19   | Object Oriented Programming                  | 2022-23 |
| 597 | B.Tech AI&ML                   | BTES-302-18   | Digital Electronics Lab                      | 2022-23 |
| 597 | B.Tech AI&ML                   | BTCS-303-18   | Data Structure & Algorithms Lab              | 2022-23 |
| 597 | B.Tech AI&ML                   | BTCS-304-18   | Object Oriented Programming Lab              | 2022-23 |
| 597 | B.Tech AI&ML                   | BTCS-305-18   | IT Workshop                                  | 2022-23 |
| 597 | B.Tech AI&ML                   | BTES 401-18   | Computer Organization & Architecture         | 2022-23 |
| 597 | B.Tech AI&ML                   | BTCS 402-18   | Operating Systems                            | 2022-23 |
| 597 | B.Tech AI&ML                   | BTCS 403-18   | Design & Analysis of Algorithms              | 2022-23 |
| 597 | B.Tech AI&ML                   | BTES 402-18   | Computer Organization & Architecture Lab     | 2022-23 |
| 597 | B.Tech AI&ML                   | BTCS 404-18   | Operating Systems Lab                        | 2022-23 |
| 597 | B.Tech AI&ML                   | BTCS 405-18   | Design & Analysis of Algorithms Lab          | 2022-23 |
| 597 | B.Tech AI&ML                   | BTES 501-20   | Statistical Computing Techniques using R     | 2022-23 |
| 597 | B.Tech AI&ML                   | BTCS 501-18   | Database Management Systems                  | 2022-23 |
| 597 | B.Tech AI&ML                   | BTCS 502-18   | Formal Language & Automata Theory            | 2022-23 |
| 597 | B.Tech AI&ML                   | BTAIML 501-20 | Programming in Python                        | 2022-23 |
| 597 | B.Tech AI&ML                   | BTAIML 502-20 | Artificial Intelligence                      | 2022-23 |



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|-----|--------------|--------------------|--|---------|
| 597 | B.Tech AI&ML | BTAI ML70 1-20     | Computer Vision                            | 2022-23 |
| 597 | B.Tech AI&ML | BTCS 703-18        | Project-II                                 | 2022-23 |
| 597 | B.Tech AI&ML | BTCS 801-20        | Semester Training                          | 2022-23 |
| 597 | B.Tech AI&ML | BTAIML 505-20      | Data Visualization using tableau           | 2022-23 |
| 597 | B.Tech AI&ML | BTAIML 506-20      | User Interface development                 | 2022-23 |
| 597 | B.Tech AI&ML | BTAIML 509-20      | Java Programming                           | 2022-23 |
| 597 | B.Tech AI&ML | BTCS702-18         | Data Mining and Data Warehouse             | 2022-23 |
| 597 | B.Tech AI&ML | Graph Theory       | Graph Theory                               | 2022-23 |
| 597 | B.Tech AI&ML | Big Data Analytics | Big Data Analytics                         | 2022-23 |
| 597 | B.Tech AI&ML | BTAIML603-20       | Neural Networks                            | 2022-23 |
| 597 | B.Tech AI&ML | BTAIML605-20       | Recommender System                         | 2022-23 |
| 597 | B.Tech AI&ML | BTAIML607-20       | Advance Computing and Network Technologies | 2022-23 |
| 597 | B.Tech AI&ML | BTAIML703-20       | NLP and Information Retrieval              | 2022-23 |
| 597 | B.Tech AI&ML | BTAIML705-20       | Network Security Applications using AI     | 2022-23 |
| 597 | B.Tech AI&ML | BTAIML707-20       | Robotics and Intelligent systems           | 2022-23 |
| 597 | B.Tech AI&ML | BTCS704-18         | Deep Learning                              | 2022-23 |
| 597 | B.Tech AI&ML | BTAIML709-20       | Applied Intelligence                       | 2022-23 |
| 597 | B.Tech AI&ML | BTAIML711-20       | Augmented and Virtual reality              | 2022-23 |

  
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 Department of Electronics & Communication Engineering  
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3.1 List of courses offered across all programs during last year

| Program code                       | Program name                | Course code   | Course name   | Year of offering the course |
|------------------------------------|-----------------------------|---------------|---|-----------------------------|
| 635 / B.Sc (Hons.) Food Technology | B.Sc (Hons) Food Technology | BSFT111-21    | Introduction to Food Science                                | 2023-24                     |
| 635 / B.Sc (Hons.) Food Technology | B.Sc (Hons) Food Technology | BSFT112-21    | Technology of Food Preservation                             | 2023-24                     |
| 635 / B.Sc (Hons.) Food Technology | B.Sc (Hons) Food Technology | BSFT113-21    | Lab - Introduction to Food Science                          | 2023-24                     |
| 635 / B.Sc (Hons.) Food Technology | B.Sc (Hons) Food Technology | BSFT114-21    | Lab - Technology of Food Preservation                       | 2023-24                     |
| 635 / B.Sc (Hons.) Food Technology | B.Sc (Hons) Food Technology | BSCGE-209-21  | Introduction to Computer                                    | 2023-24                     |
| 635 / B.Sc (Hons.) Food Technology | B.Sc (Hons) Food Technology | BSCGE-210-21  | Introduction to Computer (Lab)                              | 2023-24                     |
| 635 / B.Sc (Hons.) Food Technology | B.Sc (Hons) Food Technology | BTHU103-18    | English   | 2023-24                     |
| 635 / B.Sc (Hons.) Food Technology | B.Sc (Hons) Food Technology | BTHU104-18    | English (Lab)   | 2023-24                     |
| 635 / B.Sc (Hons.) Food Technology | B.Sc (Hons) Food Technology | HVPE101-18    | Human Values, De-addiction and Traffic Rules                | 2023-24                     |
| 635 / B.Sc (Hons.) Food Technology | B.Sc (Hons) Food Technology | HVPE102-18    | Human Values, De-addiction and Traffic Rules (Lab/ Seminar) | 2023-24                     |
| 635 / B.Sc (Hons.) Food Technology | B.Sc (Hons) Food Technology |               | Mentoring and Professional Development                      | 2023-24                     |
| 635 / B.Sc (Hons.) Food Technology | B.Sc (Hons) Food Technology | BSFT121-18    | Food and Nutrition  | 2023-24                     |
| 635 / B.Sc (Hons.) Food Technology | B.Sc (Hons) Food Technology | BSFT122-18    | Post-harvest management of Fruits & Vegetables              | 2023-24                     |
| 635 / B.Sc (Hons.) Food Technology | B.Sc (Hons) Food Technology | BSFT123-18    | Lab - Food and Nutrition                                    | 2023-24                     |
| 635 / B.Sc (Hons.) Food Technology | B.Sc (Hons) Food Technology | BSFT124-18    | Lab-Post-harvest management of Fruits & Vegetables          | 2023-24                     |
| 635 / B.Sc (Hons.) Food Technology | B.Sc (Hons) Food Technology | BSCSEC-101-21 | Entrepreneurship Development                                | 2023-24                     |
| 635 / B.Sc (Hons.) Food Technology | B.Sc (Hons) Food Technology | BSCSEC-102-21 | Food Product Development                                    | 2023-24                     |
| 635 / B.Sc (Hons.) Food Technology | B.Sc (Hons) Food Technology | BSCGE-201-21  | Introduction to Biology                                     | 2023-24                     |
| 635 / B.Sc (Hons.) Food Technology | B.Sc (Hons) Food Technology | BSCGE-202-21  | Introduction to Biology (Lab)                               | 2023-24                     |
| 635 / B.Sc (Hons.) Food Technology | B.Sc (Hons) Food Technology | EVS102-18     | Environmental Science                                       | 2023-24                     |
| 635 / B.Sc (Hons.) Food Technology | B.Sc (Hons) Food Technology | BSFT211-21    | Food Microbiology   | 2023-24                     |
| 635 / B.Sc (Hons.) Food Technology | B.Sc (Hons) Food Technology | BSFT212-21    | Food Chemistry-I  | 2023-24                     |
| 635 / B.Sc (Hons.) Food Technology | B.Sc (Hons) Food Technology | BSFT213-21    | Technology of Fruits, Vegetables and Plantation Crops       | 2023-24                     |
| 635 / B.Sc (Hons.) Food Technology | B.Sc (Hons) Food Technology | BSFT214-21    | Lab - Food Microbiology                                     | 2023-24                     |
| 635 / B.Sc (Hons.) Food Technology | B.Sc (Hons) Food Technology | BSFT215-21    | Lab - Food Chemistry-I                                      | 2023-24                     |
| 635 / B.Sc (Hons.) Food Technology | B.Sc (Hons) Food Technology | BSFT216-21    | Lab- Technology of Fruits, Vegetables and Plantation Crops  | 2023-24                     |
| 635 / B.Sc (Hons.) Food Technology | B.Sc (Hons) Food Technology | BSCGE-201-21  | Introduction to Biology                                     | 2023-24                     |
| 635 / B.Sc (Hons.) Food Technology | B.Sc (Hons) Food Technology | BSCGE-202-21  | Introduction to Biology (Lab)                               | 2023-24                     |
| 635 / B.Sc (Hons.) Food Technology | B.Sc (Hons) Food Technology | BMPD302-18    | Mentoring and Professional Development                      | 2023-24                     |
| 635 / B.Sc (Hons.) Food Technology | B.Sc (Hons) Food Technology | BSFT221-21    | Technology of Cereals, Pulses and Oilseeds                  | 2023-24                     |
| 635 / B.Sc (Hons.) Food Technology | B.Sc (Hons) Food Technology | BSFT222-21    | Food Chemistry-II   | 2023-24                     |
| 635 / B.Sc (Hons.) Food Technology | B.Sc (Hons) Food Technology | BSFT223-21    | Technology of Meat, Fish & Poultry                          | 2023-24                     |
| 635 / B.Sc (Hons.) Food Technology | B.Sc (Hons) Food Technology | BSFT224-21    | Lab - Technology of Cereals, Pulses and Oilseeds            | 2023-24                     |
| 635 / B.Sc (Hons.) Food Technology | B.Sc (Hons) Food Technology | BSFT225-21    | Lab - Food Chemistry-II                                     | 2023-24                     |

|                                    |                             |                |   |         |
|------------------------------------|-----------------------------|----------------|---|---------|
| 635 / B.Sc (Hons.) Food Technology | B.Sc (Hons) Food Technology | BSFT226-21     | Lab- Technology of Meat, Fish & Poultry             | 2023-24 |
| 635 / B.Sc (Hons.) Food Technology | B.Sc (Hons) Food Technology | BSCSE-104-21   | Confectionary Technology (Lab)                      | 2023-24 |
| 635 / B.Sc (Hons.) Food Technology | B.Sc (Hons) Food Technology | BSCGE-205-21   | Biochemistry  | 2023-24 |
| 635 / B.Sc (Hons.) Food Technology | B.Sc (Hons) Food Technology | BSCGE-206-21   | Biochemistry (Lab)                                  | 2023-24 |
| 635 / B.Sc (Hons.) Food Technology | B.Sc (Hons) Food Technology | BMPD402-18     | Mentoring and Professional Developmen               | 2023-24 |
| 635 / B.Sc (Hons.) Food Technology | B.Sc (Hons) Food Technology | BSFT311-21     | Food Engineering                                    | 2023-24 |
| 635 / B.Sc (Hons.) Food Technology | B.Sc (Hons) Food Technology | BSFT312-21     | Oil & Fat Processing Technology                     | 2023-24 |
| 635 / B.Sc (Hons.) Food Technology | B.Sc (Hons) Food Technology | BSFT313-21     | Lab- Food Engineering                               | 2023-24 |
| 635 / B.Sc (Hons.) Food Technology | B.Sc (Hons) Food Technology | BSFT314-21     | Lab - Oil & Fat Processing Technology               | 2023-24 |
| 635 / B.Sc (Hons.) Food Technology | B.Sc (Hons) Food Technology | BSCDSE-105-21  | DSE-1 Bakery Technology (Theory)                    | 2023-24 |
| 635 / B.Sc (Hons.) Food Technology | B.Sc (Hons) Food Technology | BSCDSE-106-21  | DSE-1 Bakery Technology                             | 2023-24 |
| 635 / B.Sc (Hons.) Food Technology | B.Sc (Hons) Food Technology | BSCDSE-107-21  | (Lab)   | 2023-24 |
| 635 / B.Sc (Hons.) Food Technology | B.Sc (Hons) Food Technology | BSCDSE-108-21  | DSE-2 Food Packaging                                | 2023-24 |
| 635 / B.Sc (Hons.) Food Technology | B.Sc (Hons) Food Technology | BSFT319-21     | In Plant Training Seminar                           | 2023-24 |
| 635 / B.Sc (Hons.) Food Technology | B.Sc (Hons) Food Technology | BMPD502-21     | Mentoring and Professional Development              | 2023-24 |
| 635 / B.Sc (Hons.) Food Technology | B.Sc (Hons) Food Technology | BSFT321-21     | Dairy Technology                                    | 2023-24 |
| 635 / B.Sc (Hons.) Food Technology | B.Sc (Hons) Food Technology | BSFT322-21     | Food Quality and Sensory                            | 2023-24 |
| 635 / B.Sc (Hons.) Food Technology | B.Sc (Hons) Food Technology | BSFT323-21     | Evaluation  | 2023-24 |
| 635 / B.Sc (Hons.) Food Technology | B.Sc (Hons) Food Technology | BSFT324-21     | Lab- Dairy Technology                               | 2023-24 |
| 635 / B.Sc (Hons.) Food Technology | B.Sc (Hons) Food Technology | BSCDSE-109-21  | DSE -3 Nutraceuticals and Functional Foods (Theory) | 2023-24 |
| 635 / B.Sc (Hons.) Food Technology | B.Sc (Hons) Food Technology | BSCDSE-110-21  | DSE -3 Nutraceuticals and Functional Foods Lab      | 2023-24 |
| 635 / B.Sc (Hons.) Food Technology | B.Sc (Hons) Food Technology | BSCDSE-111-21  | DSE -4 Food Plant Sanitation (Theory)               | 2023-24 |
| 635 / B.Sc (Hons.) Food Technology | B.Sc (Hons) Food Technology | BSCDSE-112-21  | DSE -4 Food Plant Sanitation (Lab)                  | 2023-24 |
| 400/ M.Sc. Food Technology         | M.Sc. Food Technology       | UC-MSFT-511-19 | Food Chemistry                                      | 2023-24 |
| 400/ M.Sc. Food Technology         | M.Sc. Food Technology       | UC-MSFT-512-19 | Principles of Food Engineering                      | 2023-24 |
| 400/ M.Sc. Food Technology         | M.Sc. Food Technology       | UC-MSFT-513-19 | Food Microbiology                                   | 2023-24 |
| 400/ M.Sc. Food Technology         | M.Sc. Food Technology       | UC-MSFT-514-19 | Food Processing & Preservation                      | 2023-24 |
| 400/ M.Sc. Food Technology         | M.Sc. Food Technology       | UC-MSFT-515-19 | Lab - I (Food Microbiology)                         | 2023-24 |
| 400/ M.Sc. Food Technology         | M.Sc. Food Technology       | UC-MSFT-516-19 | Lab - II (Food Preservation & Analysis)             | 2023-24 |
| 400/ M.Sc. Food Technology         | M.Sc. Food Technology       | UC-MSFT-517-19 | Nutraceuticals & Functional Foods                   | 2023-24 |
| 400/ M.Sc. Food Technology         | M.Sc. Food Technology       | UC-MSFT-521-19 | Dairy Technology                                    | 2023-24 |
| 400/ M.Sc. Food Technology         | M.Sc. Food Technology       | UC-MSFT-522-19 | Technology of Fruits & Vegetables                   | 2023-24 |
| 400/ M.Sc. Food Technology         | M.Sc. Food Technology       | UC-MSFT-523-19 | Packaging Technology                                | 2023-24 |
| 400/ M.Sc. Food Technology         | M.Sc. Food Technology       | UC-MSFT-524-19 | Lab - III (Dairy Technology)                        | 2023-24 |
| 400/ M.Sc. Food Technology         | M.Sc. Food Technology       | UC-MSFT-525-19 | Lab - IV (Technology of Fruits & Vegetables)        | 2023-24 |
| 400/ M.Sc. Food Technology         | M.Sc. Food Technology       | UC-MSFT-526-19 | Lab - V (Packaging Technology)                      | 2023-24 |

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|-----------------------------|-------------------------|----------------|---|---------|
| 400/ M.Sc. Food Technology  | M.Sc. Food Technology   | UC-MSFT-527-19 | Bioprocess Technology                                 | 2023-24 |
| 400/ M.Sc. Food Technology  | M.Sc. Food Technology   | UC-MSFT-528-19 | Technology of Beverages                               | 2023-24 |
| 400/ M.Sc. Food Technology  | M.Sc. Food Technology   | UC-MSFT-529-19 | Lab - VI (Bioprocess Technology)                      | 2023-24 |
| 400/ M.Sc. Food Technology  | M.Sc. Food Technology   | UC-MSFT-530-19 | Lab - VII (Technology of Beverages)                   | 2023-24 |
| 400/ M.Sc. Food Technology  | M.Sc. Food Technology   | UC-MSFT-611-19 | Technology of Cereals, Pulses & oilseeds              | 2023-24 |
| 400/ M.Sc. Food Technology  | M.Sc. Food Technology   | UC-MSFT-612-19 | Food Safety, Standards & Quality Control              | 2023-24 |
| 400/ M.Sc. Food Technology  | M.Sc. Food Technology   | UC-MSFT-613-19 | Agri Business Management                              | 2023-24 |
| 400/ M.Sc. Food Technology  | M.Sc. Food Technology   | UC-MSFT-614-19 | Lab - VIII (Technology of Cereals, Pulses & oilseeds) | 2023-24 |
| 400/ M.Sc. Food Technology  | M.Sc. Food Technology   | UC-MSFT-615-19 | Food Additives  | 2023-24 |
| 400/ M.Sc. Food Technology  | M.Sc. Food Technology   | UC-MSFT-616-19 | Nutrition & Health                                    | 2023-24 |
| 400/ M.Sc. Food Technology  | M.Sc. Food Technology   | UC-MSFT-617-19 | Lab – IX (Food Additives)                             | 2023-24 |
| 400/ M.Sc. Food Technology  | M.Sc. Food Technology   | UC-MSFT-618-19 | Lab – X (Nutrition & Health)                          | 2023-24 |
| 400/ M.Sc. Food Technology  | M.Sc. Food Technology   | UC-MSFT-619-19 | In-Plant Training                                     | 2023-24 |
| 400/ M.Sc. Food Technology  | M.Sc. Food Technology   | UC-MSFT-620-19 | Seminar   | 2023-24 |
| 400/ M.Sc. Food Technology  | M.Sc. Food Technology   | UC-MSFT-621-19 | Snack Food Technology                                 | 2023-24 |
| 400/ M.Sc. Food Technology  | M.Sc. Food Technology   | UC-MSFT-622-19 | Food Biotechnology                                    | 2023-24 |
| 400/ M.Sc. Food Technology  | M.Sc. Food Technology   | UC-MSFT-623-19 | Technology of Meat, Fish an Poultry                   | 2023-24 |
| 400/ M.Sc. Food Technology  | M.Sc. Food Technology   | UC-MSFT-624-19 | Dissertation  | 2023-24 |
| 613/M.Sc. Clinical Research | M.Sc. Clinical Research | UC-MSCR301-19  | Pharmacotherapeutics -II                              | 2023-24 |
| 613/M.Sc. Clinical Research | M.Sc. Clinical Research | UC-MSCR302-19  | Clinical Study Design                                 | 2023-24 |
| 613/M.Sc. Clinical Research | M.Sc. Clinical Research | UC-MSCR303-19  | Research Methodology                                  | 2023-24 |
| 613/M.Sc. Clinical Research | M.Sc. Clinical Research | UC-MSCR304-19  | Pharmacovigilance                                     | 2023-24 |
| 613/M.Sc. Clinical Research | M.Sc. Clinical Research | UC-MSCR305-19  | Clinical Research Lab III                             | 2023-24 |
| 613/M.Sc. Clinical Research | M.Sc. Clinical Research | UC-MSCR306-19  | ICT Skills Lab  | 2023-24 |
| 613/M.Sc. Clinical Research | M.Sc. Clinical Research | UC-MSCR307-19  | Journal Club  | 2023-24 |
| 613/M.Sc. Clinical Research | M.Sc. Clinical Research | UC-MSCR308-19  | Synopsis  | 2023-24 |
| 613/M.Sc. Clinical Research | M.Sc. Clinical Research | UC-MSCR311-20  | Clinical Trial Operations                             | 2023-24 |
| 613/M.Sc. Clinical Research | M.Sc. Clinical Research | UC-MSCR313-19  | Pharmacoeconomics & Health Technology Assessment      | 2023-24 |
| 613/M.Sc. Clinical Research | M.Sc. Clinical Research | UC-MSCR401-19  | Seminar   | 2023-24 |
| 613/M.Sc. Clinical Research | M.Sc. Clinical Research | UC-MSCR402-19  | Dissertation  | 2023-24 |
| 613/M.Sc. Clinical Research | M.Sc. Clinical Research | UC-MSCR403-19  | Co-curricular Activities                              | 2023-24 |

*Shahar*

Head  
 Deptt. of Food Science & Technology  
 I.K. Gujral Punjab Technical University  
 KAPURTHALA

Signature of Head of Department

## Department of Management Studies

| 3.1 List of courses offered across all programs during 2023-24 |              |              |   |                             |
|--|--------------|--------------|---|-----------------------------|
| Program code   | Program name | Course code  | Course name   | Year of offering the course |
| 28   | MBA          | MBA101-18    | Foundations of Management                           | 2023-24                     |
| 28   | MBA          | MBA 102-18   | Managerial Economics                                | 2023-24                     |
| 28   | MBA          | MBA 103-18   | Quantitative Techniques                             | 2023-24                     |
| 28   | MBA          | MBA 104-18   | Accounting for Management and Reporting             | 2023-24                     |
| 28   | MBA          | MBA 105-18   | Business Environment and Indian Economy             | 2023-24                     |
| 28   | MBA          | MBA 106-18   | Business Ethics and CSR                             | 2023-24                     |
| 28   | MBA          | MBA 107-18   | Business Communication for Managerial Effectiveness | 2023-24                     |
| 28   | MBA          | MBA 201-18   | Business Analytics for Decision Making              | 2023-24                     |
| 28   | MBA          | MBA 202-18   | Legal Environment for Business                      | 2023-24                     |
| 28   | MBA          | MBA 203-21   | Marketing Management                                | 2023-24                     |
| 28   | MBA          | MBA 204-18   | Human Resource Management                           | 2023-24                     |
| 28   | MBA          | MBA 205-18   | Production and Operations Management                | 2023-24                     |
| 28   | MBA          | MBA 206-21   | Corporate Finance and Policy                        | 2023-24                     |
| 28   | MBA          | MBA 207-18   | Entrepreneurship and Project Management             | 2023-24                     |
| 28   | MBA          | MBAGE 201-18 | Computer Applications for Business                  | 2023-24                     |
| 28   | MBA          | MBA 301-18   | Organizational Behaviour & Design                   | 2023-24                     |

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|    |     |            |   |         |
|----|-----|------------|---|---------|
| 28 | MBA | MBA 302-18 | Marketing Research                                      | 2023-24 |
| 28 | MBA | MBA 303-18 | Seminar on Summer Training Report                       | 2023-24 |
| 28 | MBA | MBA 921-18 | Consumer Behaviour                                      | 2023-24 |
| 28 | MBA | MBA 922-18 | Services Marketing                                      | 2023-24 |
| 28 | MBA | MBA 911-18 | Investment Analysis and Portfolio Management            | 2023-24 |
| 28 | MBA | MBA 912-18 | Management of Financial System                          | 2023-24 |
| 28 | MBA | MBA 931-18 | Organizational Change and Development                   | 2023-24 |
| 28 | MBA | MBA 932-18 | Employee Relations                                      | 2023-24 |
| 28 | MBA | MBA 941-18 | Data Mining for Business Decisions                      | 2023-24 |
| 28 | MBA | MBA 942-18 | E-commerce and Digital Markets                          | 2023-24 |
| 28 | MBA | MBA 401-18 | Corporate Strategy                                      | 2023-24 |
| 28 | MBA | MBA 402-18 | Project   | 2023-24 |
| 28 | MBA | MBA 403-18 | Workshop on Indian Ethos                                | 2023-24 |
| 28 | MBA | MBA 923-18 | Integrated Marketing Communication and Brand Management | 2023-24 |
| 28 | MBA | MBA 924-18 | Retail and Sales Management                             | 2023-24 |
| 28 | MBA | MBA 925-18 | International and Social Media Marketing                | 2023-24 |
| 28 | MBA | MBA 926-18 | Bottom of Pyramid and B2B Marketing                     | 2023-24 |
| 28 | MBA | MBA 913-18 | Behavioural Finance                                     | 2023-24 |

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|    |     |              |   |         |
|----|-----|--------------|---|---------|
| 28 | MBA | MBA 914-18   | Mergers, Acquisition and Corporate Restructuring            | 2023-24 |
| 28 | MBA | MBA 915-18   | International Finance and Financial Derivatives             | 2023-24 |
| 28 | MBA | MBA 916-18   | Personal Financial Planning and Taxation                    | 2023-24 |
| 28 | MBA | MBA 933-18   | International Human Resource Management                     | 2023-24 |
| 28 | MBA | MBA 934-18   | Strategic HRM   | 2023-24 |
| 28 | MBA | MBA 935-18   | Leadership and Team Dynamics                                | 2023-24 |
| 28 | MBA | MBA 936-18   | Performance and Compensation Management                     | 2023-24 |
| 28 | MBA | MBA 943-18   | Managing Software Projects                                  | 2023-24 |
| 28 | MBA | MBA 944-18   | Managing Digital Information and Transformation             | 2023-24 |
| 28 | MBA | MBA 945-18   | IT Consulting   | 2023-24 |
| 28 | MBA | MBA 946-18   | Strategic Management of IT                                  | 2023-24 |
| 9  | BBA | BBA 101-18   | Principles and Practices of Management                      | 2023-24 |
| 9  | BBA | BBA 102-18   | Basic Accounting  | 2023-24 |
| 9  | BBA | BBAGE 101-18 | Managerial Economics I                                      | 2023-24 |
| 9  | BBA | BTHU103/18   | English   | 2023-24 |
| 9  | BBA | BTHU104/18   | English Practical/Laboratory                                | 2023-24 |
| 9  | BBA | HVPE101-18   | Human Values, De-addiction and Traffic Rules                | 2023-24 |
| 9  | BBA | HVPE102-18   | Human Values, De-addiction and Traffic Rules (Lab/ Seminar) | 2023-24 |

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|   |     |               |   |         |
|---|-----|---------------|---|---------|
| 9 | BBA | BMPD 102-18   | Mentoring and Professional Development              | 2023-24 |
| 9 | BBA | BBA 201-18    | Business Statistics                                 | 2023-24 |
| 9 | BBA | BBA 202-18    | Business Environment                                | 2023-24 |
| 9 | BBA | BBAGE 201-18  | Managerial Economics II                             | 2023-24 |
| 9 | BBA | EVS102-18     | Environmental Studies                               | 2023-24 |
| 9 | BBA | BMPD 202-18   | Mentoring and Professional Development              | 2023-24 |
| 9 | BBA | BBA 301-18    | Organizational Behaviour                            | 2023-24 |
| 9 | BBA | BBA 302-18    | Marketing Management                                | 2023-24 |
| 9 | BBA | BBA 303-18    | Cost & Management Accounting                        | 2023-24 |
| 9 | BBA | BBAGE 301-18  | Production and Operation Management                 | 2023-24 |
| 9 | BBA | BBASEC 301-18 | IT tools for Business                               | 2023-24 |
| 9 | BBA | BMPD 302-18   | Mentoring and Professional Development              | 2023-24 |
| 9 | BBA | BBA 401-18    | Business Research Methods                           | 2023-24 |
| 9 | BBA | BBA 402-18    | Human Resource Management                           | 2023-24 |
| 9 | BBA | BBA 403-18    | Financial Management                                | 2023-24 |
| 9 | BBA | BBAGE 401-18  | Entrepreneurship Development                        | 2023-24 |
| 9 | BBA | BBASEC 401-18 | Business Ethics and Corporate Social Responsibility | 2023-24 |
| 9 | BBA | BMPD 402-18   | Mentoring and Professional Development              | 2023-24 |
| 9 | BBA | BBA501-18     | Operation Research                                  | 2023-24 |
| 9 | BBA | BBA502-18     | Mercantile Law                                      | 2023-24 |

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|      |     |             |  |         |
|------|-----|-------------|--|---------|
| 9    | BBA | BMPD 502-18 | Mentoring and Professional Development   | 2023-24 |
| 9    | BBA | BBA 511-18  | Consumer Behaviour                       | 2023-24 |
| 9    | BBA | BBA 512-18  | Advertising and Sales Management         | 2023-24 |
| 9    | BBA | BBA 521-18  | Corporate Accounting                     | 2023-24 |
| 9    | BBA | BBA 522-18  | Financial Markets & Services             | 2023-24 |
| 9    | BBA | BBA 531-18  | Industrial Relations & Labour Law        | 2023-24 |
| 9    | BBA | BBA 532-18  | Organisation Change & Development        | 2023-24 |
| 9    | BBA | BBA 601-18  | Strategy Management                      | 2023-24 |
| 9    | BBA | BBA 602-18  | Company Law                              | 2023-24 |
| 9    | BBA | BMPD 602-18 | Mentoring and Professional Development   | 2023-24 |
| 9    | BBA | BBA 611-18  | Services Marketing                       | 2023-24 |
| 9    | BBA | BBA 612-18  | Retailing and Logistics Management       | 2023-24 |
| 9    | BBA | BBA 621-18  | Personal Financial Planning              | 2023-24 |
| 9    | BBA | BBA 622-18  | Direct and Indirect Tax Laws             | 2023-24 |
| 9    | BBA | BBA 631     | Training & Development                   | 2023-24 |
| 9    | BBA | BBA 632     | Cross Cultural Human Resource Management | 2023-24 |
| 9001 | PhD | PHD 901     | Research Methodology                     | 2023-24 |
| 9001 | PhD | -           | Research and Publication Ethics          | 2023-24 |
| 9001 | PhD | PHD 902     | Accounting and Finance                   | 2023-24 |
| 9001 | PhD | PHD 903     | Marketing Management                     | 2023-24 |

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|      |     |         |                           |         |
|------|-----|---------|---------------------------|---------|
| 9001 | PhD | PHD 904 | Human Resource Management | 2023-24 |
| 9001 | PhD |         | Seminar                   | 2023-24 |

For *Ruppre*

Head  
Department of Management Studies  
I.K. Gujral Punjab Technical University  
Kapurthala-144603

## Department of Hotel Management

| 3.1 List of courses offered across all programs during 2023-24 |              |              |   |                             |
|--|--------------|--------------|---|-----------------------------|
| Program code   | Program name | Course code  | Course name   | Year of offering the course |
| BHMCT  | BHMCT        | BHMCT-101-18 | Food Production Foundation I                                | 2023-24                     |
| BHMCT  | BHMCT        | BHMCT-102-18 | Food Production Foundation I (Practical)                    | 2023-24                     |
| BHMCT  | BHMCT        | BHMCT-103-18 | Food & Beverage Service Foundation I                        | 2023-24                     |
| BHMCT  | BHMCT        | BHMCT-104-18 | Food & Beverage Service Foundation I (Practical)            | 2023-24                     |
| BHMCT  | BHMCT        | BHMCT-105-18 | Front Office Foundation I                                   | 2023-24                     |
| BHMCT  | BHMCT        | BHMCT-106-18 | Front Office Foundation I (Practical)                       | 2023-24                     |
| BHMCT  | BHMCT        | BHMCT-107-18 | Accommodation Operations I                                  | 2023-24                     |
| BHMCT  | BHMCT        | BHMCT-108-18 | Accommodation Operations I (Practical)                      | 2023-24                     |
| BHMCT  | BHMCT        | BTHU103/18   | English   | 2023-24                     |
| BHMCT  | BHMCT        | BTHU104/18   | English Practical/Laboratory                                | 2023-24                     |
| BHMCT  | BHMCT        | HVPE101-18   | Human Values, De-addiction and Traffic Rules                | 2023-24                     |
| BHMCT  | BHMCT        | HVPE102-18   | Human Values, De-addiction and Traffic Rules (Lab/ Seminar) | 2023-24                     |
| BHMCT  | BHMCT        | BMPD 102-18  | Mentoring and Professional Development                      | 2023-24                     |
| BHMCT  | BHMCT        | BHMCT-201-18 | Food Production Foundation II                               | 2023-24                     |
| BHMCT  | BHMCT        | BHMCT-202-18 | Food Production Foundation II (Practical)                   | 2023-24                     |

Head For *[Signature]*  
 Department of Hotel Management  
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|       |       |                |   |         |
|-------|-------|----------------|---|---------|
| BHMCT | BHMCT | BHMCT-203-18   | Food & Beverage Service Foundation II               | 2023-24 |
| BHMCT | BHMCT | BHMCT-204-18   | Food & Beverage Service Foundation II (Practical)   | 2023-24 |
| BHMCT | BHMCT | BHMCT - 205-18 | Front Office Foundation II                          | 2023-24 |
| BHMCT | BHMCT | BHMCT - 206-18 | Front Office Foundation II (Practical)              | 2023-24 |
| BHMCT | BHMCT | BHMCT-207-18   | Accommodation Operations II                         | 2023-24 |
| BHMCT | BHMCT | BHMCT-208-18   | Accommodation Operations II (Practical)             | 2023-24 |
| BHMCT | BHMCT | EVS102-18      | Environmental Studies                               | 2023-24 |
| BHMCT | BHMCT | BMPD 202-18    | Mentoring and Professional Development              | 2023-24 |
| BHMCT | BHMCT | BHMCT301-18    | Industrial Training                                 | 2023-24 |
| BHMCT | BHMCT | BHMCT 302-18   | Industrial Training                                 | 2023-24 |
| BHMCT | BHMCT | BHMCT 303-18   | Industrial Training                                 | 2023-24 |
| BHMCT | BHMCT | BHMCT 304-18   | Industrial Training                                 | 2023-24 |
| BHMCT | BHMCT | BHMCT 305-18   | Industrial Training                                 | 2023-24 |
| BHMCT | BHMCT | BMPD 302-18    | Mentoring and Professional Development              | 2023-24 |
| BHMCT | BHMCT | BHMCT401-18    | Introduction to Indian Cookery                      | 2023-24 |
| BHMCT | BHMCT | BHMCT402-18    | Introduction to Indian Cookery (Practical)          | 2023-24 |
| BHMCT | BHMCT | BHMCT-403-18   | Food and Beverage Service Operations II             | 2023-24 |
| BHMCT | BHMCT | BHMCT404-18    | Food and Beverage Service Operations II (Practical) | 2023-24 |

Head of Department  
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|       |       |              |   |         |
|-------|-------|--------------|---|---------|
| BHMCT | BHMCT | BHMCT-405-18 | Front office Operations II                          | 2023-24 |
| BHMCT | BHMCT | BHMCT-406-18 | Front office Operations II (Practical)              | 2023-24 |
| BHMCT | BHMCT | BHMCT-407-18 | Accommodation Operations III                        | 2023-24 |
| BHMCT | BHMCT | BHMCT408-18  | Accommodation Operations III (practical)            | 2023-24 |
| BHMCT | BHMCT | BHMCT-409-18 | Accounting Skills for Hospitality Managers          | 2023-24 |
| BHMCT | BHMCT | BMPD 402-18  | Mentoring and Professional Development              | 2023-24 |
| BHMCT | BHMCT | BHMCT 501-18 | Larder & Kitchen practices                          | 2023-24 |
| BHMCT | BHMCT | BHMCT 502-18 | Larder & Kitchen practices (Practical)              | 2023-24 |
| BHMCT | BHMCT | BHMCT 503-18 | Bar operations & Management                         | 2023-24 |
| BHMCT | BHMCT | BHMCT 504-18 | Bar operations & Management (Practicals)            | 2023-24 |
| BHMCT | BHMCT | BHMCT 505-18 | Front Office Operations & Management                | 2023-24 |
| BHMCT | BHMCT | BHMCT 506-18 | Front Office Operations & Management (Practical)    | 2023-24 |
| BHMCT | BHMCT | BHMCT 507-18 | Accommodation Operations and Management             | 2023-24 |
| BHMCT | BHMCT | BHMCT 508-18 | Accommodation Operations and Management (Practical) | 2023-24 |
| BHMCT | BHMCT | BHMCT 509-18 | Food and Beverage Control and Management            | 2023-24 |
| BHMCT | BHMCT | BMPD 502-18  | Mentoring and Professional Development              | 2023-24 |

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|       |       |               |   |         |
|-------|-------|---------------|---|---------|
| BHMCT | BHMCT | BHMCT 601-18  | International cuisine- An Exploration                     | 2023-24 |
| BHMCT | BHMCT | BHMCT 602-18  | International cuisine- An Exploration (Practical)         | 2023-24 |
| BHMCT | BHMCT | BHMCT 603-18  | Banquet and restaurant operations & Management            | 2023-24 |
| BHMCT | BHMCT | BHMCT 604-18  | Banquet and restaurant operations & Management Practicals | 2023-24 |
| BHMCT | BHMCT | BHMCT 605-18  | Front Office Management                                   | 2023-24 |
| BHMCT | BHMCT | BHMCT 606-18  | Front Office Management (Practical)                       | 2023-24 |
| BHMCT | BHMCT | BHMCT 607-18  | Accommodation Management                                  | 2023-24 |
| BHMCT | BHMCT | BHMCT 608-18  | Accommodation Management (Practical's)                    | 2023-24 |
| BHMCT | BHMCT | BHMCT 609-18  | Principles of Management                                  | 2023-24 |
| BHMCT | BHMCT | BMPD 602-18   | Mentoring and Professional Development                    | 2023-24 |
| BHMCT | BHMCT | BHMCT 701A-18 | Food Production Management                                | 2023-24 |
| BHMCT | BHMCT | BHMCT 702A-18 | Food Production Management (Practical)                    | 2023-24 |
| BHMCT | BHMCT | BHMCT 703A-18 | Tandoor- Principle, Concept and Application               | 2023-24 |
| BHMCT | BHMCT | BHMCT 704A-18 | Tandoor- Principle, Concept and Application Practicals    | 2023-24 |
| BHMCT | BHMCT | BHMCT 701B-18 | Food & Beverage Service Management                        | 2023-24 |

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|       |       |               |   |         |
|-------|-------|---------------|---|---------|
| BHMCT | BHMCT | BHMCT 702B-18 | Food & Beverage Service Management Practicals | 2023-24 |
| BHMCT | BHMCT | BHMCT 703B-18 | Event Management                              | 2023-24 |
| BHMCT | BHMCT | BHMCT 704B-18 | Event Management Practicals                   | 2023-24 |
| BHMCT | BHMCT | BHMCT 701C-18 | Front office Management                       | 2023-24 |
| BHMCT | BHMCT | BHMCT 702C-18 | Front office Management Practicals            | 2023-24 |
| BHMCT | BHMCT | BHMCT 703C-18 | Tour & Travel Management                      | 2023-24 |
| BHMCT | BHMCT | BHMCT 704C-18 | Tour & Travel Management Practicals           | 2023-24 |
| BHMCT | BHMCT | BHMCT 701D-18 | Accommodation Management                      | 2023-24 |
| BHMCT | BHMCT | BHMCT 702D-18 | Accommodation Management (Practical)          | 2023-24 |
| BHMCT | BHMCT | BHMCT 703D-18 | Interior Decoration                           | 2023-24 |
| BHMCT | BHMCT | BHMCT 704D-18 | Interior Decoration Practical                 | 2023-24 |
| BHMCT | BHMCT | BHMCT 705-18  | Principles of Marketing                       | 2023-24 |
| BHMCT | BHMCT | BHMCT 706-18  | Financial Management                          | 2023-24 |
| BHMCT | BHMCT | BHMCT 707-18  | Entrepreneurship                              | 2023-24 |
| BHMCT | BHMCT | BHMCT 708-18  | Project Report                                | 2023-24 |
| BHMCT | BHMCT | BHMCT 709-18  | Facility Planning                             | 2023-24 |
| BHMCT | BHMCT | BMPD 702-18   | Mentoring and Professional Development        | 2023-24 |
| BHMCT | BHMCT | BHMCT 801-18  | Specialized Hospitality Training              | 2023-24 |

Head *F. K. Gupta*  
Department of Hotel Management  
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|       |       |              |   |         |
|-------|-------|--------------|---|---------|
| BHMCT | BHMCT | BHMCT 802-18 | Project Report on emerging trends in Hospitality Industry | 2023-24 |
| BHMCT | BHMCT | BMPD 802-18  | Mentoring and Professional Development                    | 2023-24 |

  
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## 3.1 List of courses offered across all programs during last five years

| Program code | Program name                       | Course code  | Course name                              | Year of offering the course |
|--------------|------------------------------------|--------------|--|-----------------------------|
| MAJMC        | MA.Journalism & Mass Communication | MAJMC-101-18 | Introduction to Communication            | 2023-24                     |
| MAJMC        | MA.Journalism & Mass Communication | MAJMC-102-18 | History of Media in India and new trends | 2023-24                     |
| MAJMC        | MA.Journalism & Mass Communication | MAJMC-103-18 | Print Journalism                         | 2023-24                     |
| MAJMC        | MA.Journalism & Mass Communication | MAJMC-104-18 | Advertising and Public Relations         | 2023-24                     |
| MAJMC        | MA.Journalism & Mass Communication | MAJMC-105-18 | Media and Society                        | 2023-24                     |
| MAJMC        | MA.Journalism & Mass Communication | MAJMC-106-18 | Practical                                | 2023-24                     |
| MAJMC        | MA.Journalism & Mass Communication | MAJMC-201-18 | News Reporting & Editing                 | 2023-24                     |
| MAJMC        | MA.Journalism & Mass Communication | MAJMC-202-18 | New Media (1)                            | 2023-24                     |
| MAJMC        | MA.Journalism & Mass Communication | MAJMC-203-18 | Radio & TV Journalism (1)                | 2023-24                     |
| MAJMC        | MA.Journalism & Mass Communication | MAJMC-204-18 | Communication : Theory and Practice      | 2023-24                     |
| MAJMC        | MA.Journalism & Mass Communication | MAJMC-205-18 | Environment Journalism                   | 2023-24                     |
| MAJMC        | MA.Journalism & Mass Communication | MAJMC-206-18 | Business Journalism                      | 2023-24                     |
| MAJMC        | MA.Journalism & Mass Communication | MAJMC-207-18 | PRACTICAL WORK                           | 2023-24                     |
| MAJMC        | MA.Journalism & Mass Communication | MAJMC-301-18 | Radio & TV Journalism (2)                | 2023-24                     |
| MAJMC        | MA.Journalism & Mass Communication | MAJMC-302-18 | Media Research Methods                   | 2023-24                     |
| MAJMC        | MA.Journalism & Mass Communication | MAJMC-303-18 | New Media (2)                            | 2023-24                     |
| MAJMC        | MA.Journalism & Mass Communication | MAJMC-304-18 | Intercultural Communicatio               | 2023-24                     |
| MAJMC        | MA.Journalism & Mass Communication | MAJMC-305-18 | Environment Journalism                   | 2023-24                     |
| MAJMC        | MA.Journalism & Mass Communication | MAJMC-306-18 | Introduction to Marketing                | 2023-24                     |
| MAJMC        | MA.Journalism & Mass Communication | MAJMC-307-18 | PRACTICAL WORK                           | 2023-24                     |
| MAJMC        | MA.Journalism & Mass Communication | MAJMC-401-18 | Media Management Laws & Ethics           | 2023-24                     |
| MAJMC        | MA.Journalism & Mass Communication | MAJMC-402-18 | Development Communication                | 2023-24                     |
| MAJMC        | MA.Journalism & Mass Communication | MAJMC-403-18 | Film Appreciation                        | 2023-24                     |
| MAJMC        | MA.Journalism & Mass Communication | MAJMC-405-18 | Sports Journalism                        | 2023-24                     |
| MAJMC        | MA.Journalism & Mass Communication | MAJMC-406-18 | Personality Development and soft skills  | 2023-24                     |
| MAJMC        | MA.Journalism & Mass Communication | MAJMC-407-18 | Research dissertation                    | 2023-24                     |
| BAJMC        | BA.Journalism & Mass Communication | BAJMC-101-18 | Introduction to Journalism               | 2023-24                     |
| BAJMC        | BA.Journalism & Mass Communication | BAJMC-102-18 | Introduction to Media and Communication  | 2023-24                     |
| BAJMC        | BA.Journalism & Mass Communication | BAJMC103-18  | Indian Political & Social System         | 2023-24                     |

|           |                                      |                |  |         |
|-----------|--------------------------------------|----------------|--|---------|
| BAJMC     | BA.Journalism & Mass Communication   | BAJMC-104-18   | Communication Lab                        | 2023-24 |
| BAJMC     | BA.Journalism & Mass Communication   | BAJMC-201-18   | Reporting & Editing for Print            | 2023-24 |
| BAJMC     | BA.Journalism & Mass Communication   | BAJMC-202-18   | Media & cultural Studies                 | 2023-24 |
| BAJMC     | BA.Journalism & Mass Communication   | BAJMC-203-18   | Global Media and Politics                | 2023-24 |
| BAJMC     | BA.Journalism & Mass Communication   | BAJMC-204-18   | Media Ethics and Laws                    | 2023-24 |
| BAJMC     | BA.Journalism & Mass Communication   | BAJMC-205-18   | Media Lab                                | 2023-24 |
| BAJMC     | BA.Journalism & Mass Communication   | BAJMC-301-18   | Introduction to Broadcast Media          | 2023-24 |
| BAJMC     | BA.Journalism & Mass Communication   | BAJMC-302-18   | History of Media                         | 2023-24 |
| BAJMC     | BA.Journalism & Mass Communication   | BAJMC-303-18   | Advertising                              | 2023-24 |
| BAJMC     | BA.Journalism & Mass Communication   | BAJMC-304-18   | Public Relations                         | 2023-24 |
| BAJMC     | BA.Journalism & Mass Communication   | BAJMC-305-18   | Interpersonal Communication Skills       | 2023-24 |
| BAJMC     | BA.Journalism & Mass Communication   | BAJMC401-18    | Advanced New Media                       | 2023-24 |
| BAJMC     | BA.Journalism & Mass Communication   | BAJMC402-18    | Development Communication                | 2023-24 |
| BAJMC     | BA.Journalism & Mass Communication   | BAJMC403-18    | Communication Research and Methods       | 2023-24 |
| BAJMC     | BA.Journalism & Mass Communication   | BAJMC404-18    | Advanced Broadcast Media                 | 2023-24 |
| BAJMC     | BA.Journalism & Mass Communication   | BAJMC405-18    | New Media Writing and Publishing         | 2023-24 |
| BAJMC     | BA.Journalism & Mass Communication   | BAJMC501-18    | Computer Application in Mass Media       | 2023-24 |
| BAJMC     | BA.Journalism & Mass Communication   | BAJMC502-18    | Global Media                             | 2023-24 |
| BAJMC     | BA.Journalism & Mass Communication   | BAJMC503-18    | Introduction to Community Media          | 2023-24 |
| BAJMC     | BA.Journalism & Mass Communication   | BAJMC504-18    | Newspaper Organization & Functioning     | 2023-24 |
| BAJMC     | BA.Journalism & Mass Communication   | BAJMC601-18    | Marketing Communication                  | 2023-24 |
| BAJMC     | BA.Journalism & Mass Communication   | BAJMC602-18    | Basic Principles of Communication        | 2023-24 |
| BAJMC     | BA.Journalism & Mass Communication   | BAJMC603-18    | Visual Communication Basics              | 2023-24 |
| BAJMC     | BA.Journalism & Mass Communication   | BAJMC604-18    | Photo Journalisism                       | 2023-24 |
| PREPHDJMC | Ph.D.Journalism & Mass Communication | PREPHDJMC-101  | Research Methodology                     | 2023-24 |
| PREPHDJMC | Ph.D.Journalism & Mass Communication | PREPHDJMC -102 | Communication Theori                     | 2023-24 |
| PREPHDJMC | Ph.D.Journalism & Mass Communication | PREPHDJMC -103 | Relevant Knowledge in Area of            | 2023-24 |
| PREPHDJMC | Ph.D.Journalism & Mass Communication | PREPHDJMC -104 | Interdisciplinary: Computer Applications | 2023-24 |

Total Courses= 57

*[Handwritten Signature]*

Head  
Department of Journalism & Mass Communication  
IKG Punjab Technical University  
Kapurthala-144603 (Pb.)

3.1 List of courses offered across all programs during the year of 2022-23

| Program code | Program name | Course code | Course name   | Year of offering the |
|--------------|--------------|-------------|---|----------------------|
| PHDE         | PhD English  | PhD-ENG     | Paper-I Research Methodology                          | 2021-22              |
| PHDE         | PhD English  | PhD-ENG     | Paper-II (Option-I) Critical Approaches to Literature | 2021-22              |
| PHDE         | PhD English  | PhD-ENG     | Paper-II (Option-II) Stylistics, ELT & Narratology    | 2021-22              |
| PHDE         | PhD English  | PhD-ENG     | Paper-III Applied Research Methodology                | 2021-22              |
| PHDE         | PhD English  | PhD-ENG     | Paper-IV (Option-I) Communication Studies             | 2021-22              |
| PHDE         | PhD English  | PhD-ENG     | Paper-IV (Option-II) Literature & Mass Media          | 2021-22              |
| PHDE         | PhD English  | PhD-ENG     | Paper-V Research and Publication Ethics (RPE)         | 2021-22              |
| PHDP         | PhD Punjabi  | PhD-PBI     | Paper-I Research Methodology                          | 2021-22              |
| PHDP         | PhD Punjabi  | PhD-PBI     | Paper-II Literary Theory and Punjabi Literature       | 2021-22              |
| PHDP         | PhD Punjabi  | PhD-PBI     | Paper-III Applied Research Methodology                | 2021-22              |
| PHDP         | PhD Punjabi  | PhD-PBI     | Paper-IV Comperative Literature and Translaion        | 2021-22              |
| PHDE         | PhD English  | PhD-ENG     | Paper-I Research Methodology                          | 2021-22              |
| PHDE         | PhD English  | PhD-ENG     | Paper-II (Option-I) Critical Approaches to Literature | 2021-22              |
| PHDE         | PhD English  | PhD-ENG     | Paper-II (Option-II) Stylistics, ELT & Narratology    | 2021-22              |
| PHDE         | PhD English  | PhD-ENG     | Paper-III Applied Research Methodology                | 2021-22              |
| PHDE         | PhD English  | PhD-ENG     | Paper-IV (Option-I) Communication Studies             | 2021-22              |
| PHDE         | PhD English  | PhD-ENG     | Paper-IV (Option-II) Literature & Mass Media          | 2021-22              |
| PHDP         | PhD Punjabi  | PhD-PBI     | Paper-I Research Methodology                          | 2021-22              |
| PHDP         | PhD Punjabi  | PhD-PBI     | Paper-II Literary Theory and Punjabi Literature       | 2021-22              |
| PHDP         | PhD Punjabi  | PhD-PBI     | Paper-III Applied Research Methodology                | 2021-22              |
| PHDP         | PhD Punjabi  | PhD-PBI     | Paper-IV Comperative Literature and Translaion        | 2021-22              |
| PHDP         | PhD Punjabi  | PhD-PBI     | Paper-V Research and Publication Ethics (RPE)         | 2021-22              |

Number of courses in all programmes during the year of 2022-23

|        |         |
|--------|---------|
| Year   | 2022-23 |
| Number | 12      |

*[Signature]*

Head  
Department of Humanities, Languages  
and Cultural Studies  
IK Gujral Punjab Technical University, Jalandhar

A1 List of courses offered across all programs during 2023-24

| Program code | Program name   | Course code      | Course name  | Year of offering the course |
|--------------|--|------------------|--|-----------------------------|
| 15           | Physics  | BIPH101-23       | Physics  | 2023-24                     |
| 15           | Physics lab  | BIPH10218        | Physics Lab  | 2023-24                     |
| 15           | Math I   | BTAM101-23       | Math I   | 2023-24                     |
| 15           | Basic Electrical Engineering                                   | BTEE101-18       | Basic Electrical Engineering                                   | 2023-24                     |
| 15           | Basic Electrical Engineering (Lab)                             | BTEE102-18       | Basic Electrical Engineering (Lab)                             | 2023-24                     |
| 15           | Engineering Graphics & Design                                  | BTME101-21       | Engineering Graphics & Design                                  | 2023-24                     |
| 15           | Mentoring and Professional Development                         | BMPD101-18       | Mentoring and Professional Development                         | 2023-24                     |
| 15           | Chemistry-I  | BICH101-21       | Chemistry-I  | 2023-24                     |
| 15           | Chemistry-I LAB  | BICH102-18       | Chemistry-I LAB  | 2023-24                     |
| 15           | Maths-II   | BTAM201-23       | Maths-II   | 2023-24                     |
| 15           | Programming for Problem Solving                                | BTPS101-18       | Programming for Problem Solving                                | 2023-24                     |
| 15           | Programming for Problem Solving (Lab)                          | BTPS102-18       | Programming for Problem Solving (Lab)                          | 2023-24                     |
| 15           | Workshop- Manufacturing Practices                              | BTMP101-18       | Workshop / Manufacturing Practices                             | 2023-24                     |
| 15           | English  | BTHU101-18       | English  | 2023-24                     |
| 15           | English (Lab)  | BTHU102-18       | English (Lab)  | 2023-24                     |
| 15           | Mentoring and Professional Development                         | BMPD201-18       | Mentoring and Professional Development                         | 2023-24                     |
| 15           | Digital Electronics  | BTES 301-18      | Digital Electronics  | 2023-24                     |
| 15           | Data structure & Algorithms                                    | BTCS 301-18      | Data structure & Algorithms                                    | 2023-24                     |
| 15           | Object Oriented Programming                                    | BTCS 302-18      | Object Oriented Programming                                    | 2023-24                     |
| 15           | Mathematics-III  | BTAM 304-18      | Mathematics-III  | 2023-24                     |
| 15           | Humanities (Societies/Philosophy)                              | HSMC 101/102- 18 | Societies/Philosophy   | 2023-24                     |
| 15           | Digital Electronics Lab  | BTES 302-18      | Digital Electronics Lab  | 2023-24                     |
| 15           | Data structure & Algorithms Lab                                | BTCS 303-18      | Data structure & Algorithms Lab                                | 2023-24                     |
| 15           | Object Oriented Programming lab                                | BTCS 304-18      | Object Oriented Programming lab                                | 2023-24                     |
| 15           | IT Workshop*   | BTCS 305-18      | IT Workshop*   | 2023-24                     |
| 15           | Summer Institutional Training                                  |                  | Summer Institutional Training                                  | 2023-24                     |
| 15           | Discrete Mathematic  | BTCS 401-18      | Discrete Mathematic  | 2023-24                     |
| 15           | Computer Organization & Architecture                           | BTES 401-18      | Computer Organization & Architecture                           | 2023-24                     |
| 15           | Operating Systems  | BTCS 402-18      | Operating Systems  | 2023-24                     |
| 15           | Design & Analysis of Algorithms                                | BTCS 403-18      | Design & Analysis of Algorithms                                | 2023-24                     |
| 15           | Universal Human Values 2                                       | HSMC 122-18      | Universal Human Values 2                                       | 2023-24                     |
| 15           | Environmental Sciences   | EVS101- 18       | Environmental Sciences   | 2023-24                     |
| 15           | Computer Organization & Architecture Lab                       | BTES 402-18      | Computer Organization & Architecture Lab                       | 2023-24                     |
| 15           | Operating Systems Lab  | BTCS 404-18      | Operating Systems Lab  | 2023-24                     |
| 15           | Design & Analysis of Algorithms Lab                            | BTCS 405-18      | Design & Analysis of Algorithms Lab                            | 2023-24                     |
| 15           | Enterprise Resource Planning                                   | BTES 501-18      | Enterprise Resource Planning                                   | 2023-24                     |
| 15           | Database Management Systems                                    | BTCS 501-18      | Database Management Systems                                    | 2023-24                     |
| 15           | Formal Language & Automata Theory                              | BTCS 502-18      | Formal Language & Automata Theory                              | 2023-24                     |
| 15           | Software Engineering   | BTCS 503-18      | Software Engineering   | 2023-24                     |
| 15           | Computer Networks  | BTCS 504-18      | Computer Networks  | 2023-24                     |
| 15           | Programming in Python  | BTCS 510-18      | Programming in Python  | 2023-24                     |
| 15           | Constitution of India/ Essence of Indian Traditional Knowledge | MC               | Constitution of India/ Essence of Indian Traditional Knowledge | 2023-24                     |
| 15           | Database Management Systems Lab                                | BTCS 505-18      | Database Management Systems Lab                                | 2023-24                     |
| 15           | Software Engineering Lab                                       | BTCS 506-18      | Software Engineering Lab                                       | 2023-24                     |
| 15           | Computer Networks Lab  | BTCS 507-18      | Computer Networks Lab  | 2023-24                     |
| 131          | Programming in Python Lab                                      | BTCS 513-18      | Programming in Python Lab                                      | 2023-24                     |
| 131          | Industrial * Training  |                  | Industrial * Training  | 2023-24                     |
| 131          | Computer Design  | BTCS 601-18      | Computer Design  | 2023-24                     |
| 131          | Artificial Intelligence  | BTCS 602-18      | Artificial Intelligence  | 2023-24                     |
| 131          | Cloud computing  | BTCS 612-18      | Cloud computing  | 2023-24                     |
| 131          | Machine Learning   | BTCS 618-18      | Machine Learning   | 2023-24                     |
| 131          | Open Elective-I  |                  | Open Elective-I  | 2023-24                     |
| 131          | Project-I  | BTCS 603-18      | Project-I  | 2023-24                     |



|     |   |              |   |         |
|-----|---|--------------|---|---------|
| 131 | Computer Design Lab                                       | BTCS 604-18  | Computer Design Lab                                       | 2023-24 |
| 131 | Artificial Intelligence Lab                               | BTCS 605-18  | Artificial Intelligence Lab                               | 2023-24 |
| 131 | Cloud computing lab                                       | BTCS 613-18  | Cloud computing lab                                       | 2023-24 |
| 131 | Mobile Application Development Lab                        | BTCS 621-18  | Mobile Application Development lab                        | 2023-24 |
| 131 | Network Security and Cryptography                         | BTCS 701-18  | Network Security and Cryptography                         | 2023-24 |
| 131 | Data Mining and Data Warehousing                          | BTCS 702-18  | Data Mining and Data Warehousing                          | 2023-24 |
| 131 | Open Elective - II  | BTCE-***     | Open Elective - II  | 2023-24 |
| 131 | Deep Learning   | BTCS 704-18  | Deep Learning   | 2023-24 |
| 131 | Deep Learning Lab   | BTCS 705-18  | Deep Learning Lab   | 2023-24 |
| 131 | Adhoc and Wireless sensor networks                        | BTCS 716-18  | Adhoc and Wireless sensor networks                        | 2023-24 |
| 131 | Adhoc and Wireless sensor networks lab                    | BTCS 717-18  | Adhoc and Wireless sensor networks lab                    | 2023-24 |
| 131 | Project II  | BTCS 703-18  | Project II  | 2023-24 |
| 131 | Semester Training   | BTCS 801-18  | Semester Training   | 2023-24 |
| 131 | Software Engineering Lab                                  | BTCS606      | Software Engineering Lab                                  | 2023-24 |
| 131 | Simulation and Modeling Lab                               | BTCS607      | Simulation and Modeling Lab                               | 2023-24 |
| 131 | Artificial Intelligence                                   | BTCS701      | Artificial Intelligence                                   | 2023-24 |
| 131 | Theory of Computation                                     | BTCS702      | Theory of Computation                                     | 2023-24 |
| 131 | Project   | BTCS 703     | Project   | 2023-24 |
| 131 | Software Testing and Quality Assurance                    | BTCS 905     | Software Testing and Quality Assurance                    | 2023-24 |
| 131 | Cloud Computing   | BTCS 912     | Cloud Computing   | 2023-24 |
| 131 | Artificial Intelligence Lab                               | BTCS704      | Artificial Intelligence Lab                               | 2023-24 |
| 131 | Software Training   | BTCS801      | Software Training   | 2023-24 |
| 131 | Industry Oriented Project Training                        | BTCS802      | Industry Oriented Project Training                        | 2023-24 |
| 131 | Surveying & Geomatics                                     | BTCE- 301-18 | Surveying & Geomatics                                     | 2023-24 |
| 131 | Solid Mechanics*  | BTCE- 302-18 | Solid Mechanics*  | 2023-24 |
| 131 | Fluid Mechanics*  | BTCE- 303-18 | Fluid Mechanics*  | 2023-24 |
| 131 | Mathematics III* (Transform & Discrete)                   | BTAM- 301-18 | Mathematics III* (Transform & Discrete)                   | 2023-24 |
| 131 | Basic Electronics & applications in Civil Engineering     | BTEC- 305-18 | Basic Electronics & applications in Civil Engineering     | 2023-24 |
| 131 | Civil Engineering- Introduction, Societal & Global Impact | HSMC- 132-18 | Civil Engineering- Introduction, Societal & Global Impact | 2023-24 |
| 131 | Surveying & Geomatics Lab                                 | BTCE- 306-18 | Surveying & Geomatics Lab                                 | 2023-24 |
| 131 | Fluid Mechanics Lab                                       | BTCE- 307-18 | Fluid Mechanics Lab                                       | 2023-24 |
| 131 | Solid Mechanics Lab                                       | BTCE- 308-18 | Solid Mechanics Lab                                       | 2023-24 |
| 30  | Professional  | BMPD- 301-18 | Mentoring and Professional Development                    | 2023-24 |
| 30  | Training - I*   | BTCE- 332-18 | Training - I*   | 2023-24 |
| 30  | Concrete Technology                                       | BTCE- 401-18 | Concrete Technology                                       | 2023-24 |
| 30  | Material, Testing & Evaluation                            | BTCE- 402-18 | Material, Testing & Evaluation                            | 2023-24 |
| 30  | Hydrology & Water Resources                               | BTCE- 403-18 | Hydrology & Water Resources                               | 2023-24 |
| 30  | Transportation Engineering                                | BTCE- 404-18 | Transportation Engineering                                | 2023-24 |
| 30  | Disaster Management                                       | BTCE- 405-18 | Disaster Management                                       | 2023-24 |
| 30  | Environment Science (Non- credit)                         | EVS- 101-18  | Environment Science (Non- credit)                         | 2023-24 |
| 30  | Concrete Testing Lab                                      | BTCE- 406-18 | Concrete Testing Lab                                      | 2023-24 |
| 30  | Transportation Lab  | BTCE- 407-18 | Transportation Lab  | 2023-24 |
| 30  | Training - II*  | BTCE-432-18  | Training -II*   | 2023-24 |
| 30  | Mentoring and Professional Development                    | BMPD- 401-18 | Mentoring and Professional Development                    | 2023-24 |
| 30  | Engineering Geology                                       | BTCE- 501-18 | Engineering Geology                                       | 2023-24 |
| 30  | Elements of Earthquake Engineering                        | BTCE- 502-18 | Elements of Earthquake Engineering                        | 2023-24 |
| 30  | Construction Engineering & Management                     | BTCE- 503-18 | Construction Engineering & Management                     | 2023-24 |
| 30  | Environmental Engineering                                 | BTCE- 504-18 | Environmental Engineering                                 | 2023-24 |
| 30  | Structural Engineering                                    | BTCE- 505-18 | Structural Engineering                                    | 2023-24 |
| 30  | Geotechnical Engineering*                                 | BTCE- 506-18 | Geotechnical Engineering*                                 | 2023-24 |
| 30  | Geotechnical Lab  | BTCE- 507-18 | Geotechnical Lab  | 2023-24 |
| 30  | Environmental Engineering Lab                             | BTCE- 508-18 | Environmental Engineering Lab                             | 2023-24 |
| 30  | Structural Lab  | BTCE-509-18  | Structural Lab  | 2023-24 |
| 30  | Mentoring and Professional                                | BMPD-501-18  | Mentoring and Professional                                | 2023-24 |



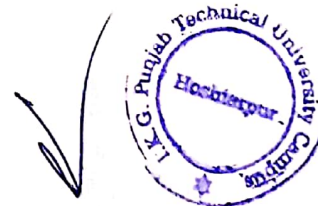
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|----|---|----------------|---|---------|
| 30 | Training - II*                            | BTCE- 532-18   | Training - II*                            | 2023-24 |
| 30 | Engineering Economics, Estimation Costing | BTCE- 601-18   | Engineering Economics, Estimation Costing | 2023-24 |
| 30 | Elective - I                              | PECE-602 X-18  | Elective - I                              | 2023-24 |
| 30 | Elective - II                             | PECE- 603 Y-18 | Elective - II                             | 2023-24 |
| 30 | Elective - III                            | PECE- 604 Z-18 | Elective - III                            | 2023-24 |
| 30 | Open Elective-I                           | OEZZ- XXX1     | Open Elective-I                           | 2023-24 |
| 30 | Open Elective - II                        | OEZZ- XXX2     | Open Elective - II                        | 2023-24 |
| 30 | Constitution of India                     | BTMC- 101-18   | Constitution of India                     | 2023-24 |
| 30 | Mentoring and Professional Development    | BMPD- 601-18   | Mentoring and Professional Development    | 2023-24 |
| 30 | Elective - IV                             | PECE- 701X-18  | Elective - IV                             | 2023-24 |
| 30 | Elective - V                              | PECE- 701Y-18  | Elective - V                              | 2023-24 |
| 30 | Open Elective -III(Metro system and Engg) | OECE-701- 18   | Open Elective -III(Metro system and Engg) | 2023-24 |
| 30 | Elective - VI                             | PECE- 703Z-18  | Elective - VI                             | 2023-24 |
| 30 | Project                                   | BTCE-704-18    | Project                                   | 2023-24 |
| 30 | Professional Practice, Law & Ethics       | HSMC-255       | Professional Practice, Law & Ethics       | 2023-24 |
| 30 | Management- I (Organization Behavior)     | BTMC- 701-18   | Management- I (Organization Behavior)     | 2023-24 |
| 30 | Project / Industrial                      | BTCE- 801-18   | Project                                   | 2023-24 |
| 30 | Mentoring and Professional Development    | BMPD-101-18    | Mentoring and Professional Development    | 2023-24 |
| 30 | Mathematics-I                             | BTAM-101-18    | Mathematics-I                             | 2023-24 |
| 30 | Basic Electrical Engineering              | BTEE-101-18    | Basic Electrical Engineering              | 2023-24 |
| 30 | Basic Electrical Engineering(Lab)         | BTEE-102-18    | Basic Electrical Engineering(Lab)         | 2023-24 |
| 30 | Engineering Graphics & Design             | BTME-101-18    | Engineering Graphics & Design             | 2023-24 |
| 30 | Electromagnetism                          | BTPH-103-18    | Electromagnetism                          | 2023-24 |
| 30 | Electromagnetism Lab                      | BTPH-113-18    | Electromagnetism Lab                      | 2023-24 |
| 30 | Mentoring and Professional Development    | BMPD-201-18    | Mentoring and Professional Development    | 2023-24 |
| 30 | Mathematics-II                            | BTAM-203-18    | Mathematics-II                            | 2023-24 |
| 30 | Chemistry-I                               | BTCH-101-18    | Chemistry-I                               | 2023-24 |
| 30 | Chemistry-I Lab                           | BTCH-102-18    | Chemistry-I Lab                           | 2023-24 |
| 15 | English                                   | BTHU-101-18    | English                                   | 2023-24 |
| 15 | English Lab                               | BTHU-102-18    | English Lab                               | 2023-24 |
| 15 | Workshop/Manufacturing Practices          | BTMP-101-18    | Workshop/Manufacturing Practices          | 2023-24 |
| 15 | Programming for Problem solving           | BTPS-101-18    | Programming for Problem solving           | 2023-24 |
| 15 | Programming for Problem solving Lab       | BTPS-102-18    | Programming for Problem solving Lab       | 2023-24 |
| 15 | Fluid Mechanics                           | BTME301-18     | Fluid Mechanics                           | 2023-24 |
| 15 | Theory of Machines - I                    | BTME302-18     | Theory of Machines - I                    | 2023-24 |
| 15 | Machine Drawing                           | BTME303-18     | Machine Drawing                           | 2023-24 |
| 15 | Strength of Materials-I                   | BTME304-18     | Strength of Materials-I                   | 2023-24 |
| 15 | Basic Thermodynamics                      | BTME305-18     | Basic Thermodynamics                      | 2023-24 |
| 15 | Strength of Material Lab                  | BTME306-18     | Strength of Material Lab                  | 2023-24 |
| 15 | Theory of Machines Lab                    | BTME307-18     | Theory of Machines Lab                    | 2023-24 |
| 15 | Fluid Mechanics Lab                       | BTME308-18     | Fluid Mechanics Lab                       | 2023-24 |
| 15 | Basic Electronics Engineering             | BTEC305-18     | Basic Electronics Engineering             | 2023-24 |
| 15 | Mentoring and Professional Development    | BMPD-301-18    | Mentoring and Professional Development    | 2023-24 |
| 15 | Applied Thermodynamics                    | BTME401-18     | Applied Thermodynamics                    | 2023-24 |
| 15 | Fluid Machines                            | BTME402-18     | Fluid Machines                            | 2023-24 |
| 15 | Strength of Materials-II                  | BTME403-18     | Strength of Materials-II                  | 2023-24 |
| 15 | Materials Engineering                     | BTME404-18     | Materials Engineering                     | 2023-24 |
| 15 | Theory of Machines-II                     | BTME405-18     | Theory of Machines-II                     | 2023-24 |
| 15 | Applied Thermodynamics Lab                | BTME406-18     | Applied Thermodynamics Lab                | 2023-24 |
| 15 | Fluid Machines Lab                        | BTME407-18     | Fluid Machines Lab                        | 2023-24 |
| 15 | Material Engineering Lab                  | BTME408-18     | Material Engineering Lab                  | 2023-24 |
| 15 | Environmental Science                     | EVS101-18      | Environmental Science                     | 2023-24 |
| 15 | Mentoring and Professional Development    | BMPD401-18     | Mentoring and Professional Development    | 2023-24 |
| 15 | Heat Transfer                             | BTME501-18     | Heat Transfer                             | 2023-24 |
| 15 | Design of Machine Elements                | BTME502-18     | Design of Machine Elements                | 2023-24 |
| 15 | Manufacturing Processes                   | BTME503-18     | Manufacturing Processes                   | 2023-24 |



|     |   |             |   |         |
|-----|---|-------------|---|---------|
| 15  | Management and Engineering Economics                        | BTME504-18  | Management and Engineering Economics                        | 2023-24 |
| 15  | Heat Transfer Lab   | BTME505-18  | Heat Transfer Lab   | 2023-24 |
| 15  | Manufacturing Processes Lab                                 | BTME506-18  | Manufacturing Processes Lab                                 | 2023-24 |
| 15  | Numerical Methods Lab                                       | BTME507-18  | Numerical Methods Lab                                       | 2023-24 |
| 15  | Essence of Indian Knowledge Tradition                       | BTME102-18  | Essence of Indian knowledge Tradition                       | 2023-24 |
| 15  | 4-weeks Industrial Training                                 | BTME409-18  | 4-weeks Industrial Training                                 | 2023-24 |
| 15  | Refrigeration and Air conditioning                          | BTME-601-18 | Refrigeration and Air conditioning                          | 2023-24 |
| 15  | Mechanical Measurements & Metrology                         | BTME-602-18 | Mechanical Measurements & Metrology                         | 2023-24 |
| 15  | Automobile Engineering                                      | BTME-603-18 | Automobile Engineering                                      | 2023-24 |
| 15  | Introduction to Industrial management                       | BTME-604-18 | Introduction to Industrial management                       | 2023-24 |
| 15  | Refrigeration and Air conditioning (Lab)                    | BTME-605-18 | Refrigeration and Air conditioning (Lab)                    | 2023-24 |
| 15  | Mechanical Measurements & Metrology (Lab)                   | BTME-606-18 | Mechanical Measurements & Metrology (Lab)                   | 2023-24 |
| 15  | Automobile Engineering (Lab)                                | BTME-607-18 | Automobile Engineering (Lab)                                | 2023-24 |
| 15  | Minor Project   | BTME-608-18 | Minor Project   | 2023-24 |
| 15  | Non-Conventional Energy Resources                           | BTME-615-18 | Non-Conventional Energy Resources                           | 2023-24 |
| 15  | Mechanical Vibrations                                       | BTME701-18  | Mechanical Vibrations                                       | 2023-24 |
| 15  | Automation in Manufacturing                                 | BTME702-18  | Automation in Manufacturing                                 | 2023-24 |
| 131 | Fundamentals of Management for Engineers                    | BTME703-18  | Fundamentals of Management for Engineers                    | 2023-24 |
| 131 | Composite Materials   | BTME612-18  | Composite Materials   | 2023-24 |
| 131 | Product Design and Development                              | BTME614-18  | Product Design and Development                              | 2023-24 |
| 131 | Road Safety   | OECE-703-18 | Road Safety   | 2023-24 |
| 131 | Project-II  | BTME704-18  | Project-II  | 2023-24 |
| 131 | Software Training   | BTME-801    | Software Training   | 2023-24 |
| 131 | Industrial Training   | BTME-801    | Industrial Training   | 2023-24 |
| 131 | Mathematics   | UGCA1901    | Mathematics   | 2023-24 |
| 131 | Fundamentals of Computer and IT                             | UGCA1902    | Fundamentals of Computer and IT                             | 2023-24 |
| 131 | Problem Solving using C                                     | UGCA1903    | Problem Solving using C                                     | 2023-24 |
| 131 | Workshop on Desktop Publishing                              | UGCA1904    | Workshop on Desktop Publishing                              | 2023-24 |
| 131 | Problem Solving using C Laboratory                          | UGCA1905    | Problem Solving using C Laboratory                          | 2023-24 |
| 131 | Fundamentals of Computer and IT                             | UGCA1906    | Fundamentals of Computer and IT                             | 2023-24 |
| 131 | English   | BTHU103/18  | English   | 2023-24 |
| 131 | English Practical/Laboratory                                | BTHU104/18  | English Practical/Laboratory                                | 2023-24 |
| 131 | Human Values, De-addiction and Traffic Rules                | HVPE101-18  | Human Values, De-addiction and Traffic Rules                | 2023-24 |
| 131 | Human Values, De-addiction and Traffic Rules (Lab/ Seminar) | HVPE102-18  | Human Values, De-addiction and Traffic Rules (Lab/ Seminar) | 2023-24 |
| 131 | Mentoring and Professional Development                      | BMPD102-18  | Mentoring and Professional Development                      | 2023-24 |
| 131 | Fundamentals of Statistics                                  | UGCA1907    | Fundamentals of Statistics                                  | 2023-24 |
| 131 | Computer System Architecture                                | UGCA1908    | Computer System Architecture                                | 2023-24 |
| 131 | Object Oriented Programming using C++                       | UGCA1909    | Object Oriented Programming using C++                       | 2023-24 |
| 131 | Object Oriented Programming using C++ Laboratory            | UGCA1910    | Object Oriented Programming using C++ Laboratory            | 2023-24 |
| 131 | Fundamentals of Statistics Laboratory                       | UGCA1911    | Fundamentals of Statistics Laboratory                       | 2023-24 |
| 131 | Computer System Architecture Laboratory                     | UGCA1912    | Computer System Architecture Laboratory                     | 2023-24 |
| 131 | Environmental Studies                                       | EVS102-18   | Environmental Studies                                       | 2023-24 |
| 131 | Mentoring and Professional Development                      | BMPD202-18  | Mentoring and Professional Development                      | 2023-24 |
| 131 | Computer Networks   | UGCA1913    | Computer Networks   | 2023-24 |
| 131 | Programming in Python                                       | UGCA1914    | Programming in Python                                       | 2023-24 |
| 131 | Data Structures   | UGCA1915    | Data Structures   | 2023-24 |
| 131 | Computer Networks Laboratory                                | UGCA1916    | Computer Networks Laboratory                                | 2023-24 |
| 131 | Programming in Python Laboratory                            | UGCA1917    | Programming in Python Laboratory                            | 2023-24 |



|     |  |                         |  |         |
|-----|--|-------------------------|--|---------|
| 131 | Data Structures Laboratory               | UGCA1918                | Data Structures Laboratory               | 2023-24 |
| 131 | PC Assembly & Troubleshooting            | UGCA1919                | PC Assembly & Troubleshooting            | 2023-24 |
| 131 | PC Assembly & Troubleshooting Laboratory | UGCA1920                | PC Assembly & Troubleshooting Laboratory | 2023-24 |
| 131 | Mentoring and Professional Development   | BMPD302-18              | Mentoring and Professional Development   | 2023-24 |
| 131 | Software Engineering                     | UGCA1921                | Software Engineering                     | 2023-24 |
| 131 | Database Management Systems              | UGCA1922                | Database Management Systems              | 2023-24 |
| 131 | Operating Systems                        | UGCA1923                | Operating Systems                        | 2023-24 |
| 131 | Software Engineering Laboratory          | UGCA1924                | Software Engineering Laboratory          | 2023-24 |
| 131 | Database Management Systems Laboratory   | UGCA1925                | Database Management Systems Laboratory   | 2023-24 |
| 30  | Laboratory                               | UGCA1926                | Operating Systems Laboratory             | 2023-24 |
| 30  | Web Designing                            | UGCA1927                | Web Designing                            | 2023-24 |
| 30  | Web Designing Laboratory                 | UGCA1928                | Web Designing Laboratory                 | 2023-24 |
| 30  | Mentoring and Professional Development   | BMPD402-18              | Mentoring and Professional Development   | 2023-24 |
| 30  | Programming in PHP                       | UGCA1929                | Programming in PHP                       | 2023-24 |
| 30  | Programming in PHP Laboratory            | UGCA1930                | Programming in PHP Laboratory            | 2023-24 |
| 30  | Programming in Java                      | UGCA1932                | Programming in Java                      | 2023-24 |
| 30  | Data Warehouse and Mining                | UGCA1931                | Data Warehouse and Mining                | 2023-24 |
| 30  | Computer Graphics                        | UGCA1934                | Computer Graphics                        | 2023-24 |
| 30  | Programming in Java Laboratory           | UGCA1938                | Programming in Java Laboratory           | 2023-24 |
| 30  | Data Warehouse and Mining Laboratory     | UGCA1937                | Data Warehouse and Mining Laboratory     | 2023-24 |
| 30  | Computer Graphics Laboratory             | UGCA1940                | Computer Graphics Laboratory             | 2023-24 |
| 30  | Minor Project                            | Project                 | Minor Project                            | 2023-24 |
| 30  | Institutional Summer Training*           |                         | Institutional Summer Training*           | 2023-24 |
| 30  | Mentoring and Professional Development   | BMPD502-18              | Mentoring and Professional Development   | 2023-24 |
| 30  | Android Programming                      | UGCA1943                | Android Programming                      | 2023-24 |
| 30  | Android Programming Laboratory           | UGCA1944                | Android Programming Laboratory           | 2023-24 |
| 30  | Open Elective-II                         | Open Elective-II        | Open Elective-II                         | 2023-24 |
| 30  | Elective-III                             | Elective-III            | Elective-III                             | 2023-24 |
| 30  | Elective-IV                              | Elective-IV             | Elective-IV                              | 2023-24 |
| 30  | Elective-III Laboratory                  | Elective-III Laboratory | Elective-III Laboratory                  | 2023-24 |
| 30  | Elective-IV Laboratory                   | Elective-IV Laboratory  | Elective-IV Laboratory                   | 2023-24 |
| 30  | Major Project                            | Project                 | Major Project                            | 2023-24 |
| 30  | Mentoring and Professional Development   | BMPD602-18              | Mentoring and Professional Development   | 2023-24 |





3.1 List of courses offered across all programs during last five years

| Program code | Program name | Course code     | Course name   | Year of offering the course |
|--------------|--------------|-----------------|---|-----------------------------|
|              |              | BTPH104-18      | Semiconductor Physics   | 2023-2024                   |
|              |              | BTPH114-18      | Semiconductor Physics Lab   | 2023-2024                   |
|              |              | BTAM104-18      | Mathematics Paper I   | 2023-2024                   |
|              |              | BTAM 204-18     | Mathematics Paper II  | 2023-2024                   |
|              |              | BTEE103-18      | Basic Electrical Engineering  | 2023-2024                   |
|              |              | BTEE102-18      | Basic Electrical Engineering (Lab)                                    | 2023-2024                   |
|              |              | BTME101-18      | Engineering Graphics & Design   | 2023-2024                   |
|              |              | BMPD101-18      | Mentoring and Professional Development                                | 2023-2024                   |
|              |              | BTCH101-18      | Chemistry-I   | 2023-2024                   |
|              |              | BTCH102-18      | Chemistry-I (Lab)   | 2023-2024                   |
|              |              | BTPS101-18      | Programming for Problem Solving                                       | 2023-2024                   |
|              |              | BTPS102-18      | Programming for Problem Solving (Lab)                                 | 2023-2024                   |
|              |              | BTMP101-18      | Workshop / Manufacturing Practices                                    | 2023-2024                   |
|              |              | BTHU101-18      | English   | 2023-2024                   |
|              |              | BTHU102-18      | English (Lab)   | 2023-2024                   |
|              |              | BMPD201-18      | Mentoring and Professional Development                                | 2023-2024                   |
|              |              | BTES 301-18     | Digital Electronics   | 2023-2024                   |
|              |              | BTCS 301-18     | Data structure & Algorithms   | 2023-2024                   |
|              |              | BTCS 302-18     | Object Oriented Programming   | 2023-2024                   |
|              |              | BTAM 304-18     | Mathematics-III   | 2023-2024                   |
|              |              | HSMC 101/102-18 | Foundation Course in Humanities (Development of Societies/Philosophy) | 2023-2024                   |
|              |              | BTES 302-18     | Digital Electronics Lab   | 2023-2024                   |
|              |              | BTCS 303-18     | Data structure & Algorithms Lab                                       | 2023-2024                   |
|              |              | BTCS 304-18     | Object Oriented Programming lab.                                      | 2023-2024                   |
|              |              | BTCS 305-18     | IT Workshop   | 2023-2024                   |
|              |              |                 | Summer Institutional Training   | 2023-2024                   |
|              |              | BTCS 401-18     | Discrete Mathematics  | 2023-2024                   |
|              |              | BTES 401-18     | Computer Organization & Architecture                                  | 2023-2024                   |
|              |              | BTCS 402-18     | Operating Systems   | 2023-2024                   |
|              |              | BTCS 403-18     | Design & Analysis of Algorithms                                       | 2023-2024                   |
|              |              | HSMC 122-18     | Universal Human Values-II   | 2023-2024                   |
|              |              | EVS101-18       | Environmental Sciences  | 2023-2024                   |
|              |              | BTES 402-18     | Computer Organization & Architecture Lab                              | 2023-2024                   |
|              |              | BTCS 404-18     | Operating Systems Lab   | 2023-2024                   |
|              |              | BTCS 405-18     | Design & Analysis of Algorithms Lab                                   | 2023-2024                   |
|              |              | BTCS 501-18     | Database Management Systems   | 2023-2024                   |
| 15           | B.Tech. CSE  | BTCS 502-18     | Formal Language & Automata Theory                                     | 2023-2024                   |
|              |              | BTCS 503-18     | Software Engineering  | 2023-2024                   |
|              |              | BTCS 504-18     | Computer Networks   | 2023-2024                   |
|              |              | BTCS XXX-18     | Elective-I  | 2023-2024                   |
|              |              | BTCS YYY-18     | Elective-II   | 2023-2024                   |
|              |              | BTCS 505-18     | Database Management Systems Lab                                       | 2023-2024                   |
|              |              | BTCS 506-18     | Software Engineering Lab  | 2023-2024                   |
|              |              | BTCS 507-18     | Computer Networks Lab   | 2023-2024                   |
|              |              | BTCS XXX-18     | Elective-I Lab  | 2023-2024                   |
|              |              | BTCS YYY-18     | Elective-II lab   | 2023-2024                   |
|              |              |                 | Industrial Training   | 2023-2024                   |
|              |              | BTCS 601-18     | Compiler Design   | 2023-2024                   |
|              |              | BTCS 602-18     | Artificial Intelligence   | 2023-2024                   |
|              |              | BTCS UUU-18     | Elective-II   | 2023-2024                   |
|              |              | BTCS YYY-18     | Elective-III  | 2023-2024                   |
|              |              | BTOE ***        | Open Elective-I   | 2023-2024                   |
|              |              | BTCS 603-18     | Project-1   | 2023-2024                   |
|              |              | BTCS 604-18     | Compiler Design Lab   | 2023-2024                   |
|              |              | BTCS 605-18     | Artificial Intelligence Lab   | 2023-2024                   |
|              |              | BTCS UUU-18     | Elective-II lab   | 2023-2024                   |
|              |              | BTCS YYY-18     | Elective-III lab  | 2023-2024                   |
|              |              | BTCS 701-18     | Network Security and Cryptography                                     | 2023-2024                   |
|              |              | BTCS 702-18     | Data Mining and Data Warehousing                                      | 2023-2024                   |
|              |              | BTOE ***        | Open Elective-II  | 2023-2024                   |
|              |              | BTCS ZZZ-18     | Elective-IV   | 2023-2024                   |
|              |              | BTCS TTT-18     | Elective-V  | 2023-2024                   |
|              |              | BTCS 703-18     | Project-II  | 2023-2024                   |
|              |              | BTCS ZZZ18      | Elective-IV lab   | 2023-2024                   |
|              |              | BTCS TTT-18     | Elective-V lab  | 2023-2024                   |
|              |              | BTCS 801-18     | Semester Training   | 2023-2024                   |
|              |              | BTCS VVV18UC    | Elective-V  | 2023-2024                   |
|              |              | BTCS 701-18UC   | Machine Learning  | 2023-2024                   |
|              |              | BTCS 702-18UC   | Project-II  | 2023-2024                   |
|              |              | BTCS 703-18UC   | Machine Learning Lab  | 2023-2024                   |

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|                 |  |           |
|-----------------|--|-----------|
| BTCS VV18UC     | Elective-V lab   | 2023-2024 |
| BTCS TTT18UC    | Elective-VI lab  | 2023-2024 |
| BTCS 801-18UC   | Semester Training  | 2023-2024 |
| UGCA1901        | Mathematics  | 2023-2024 |
| UGCA1902        | Fundamentals of Computer and IT                              | 2023-2024 |
| UGCA1903        | Problem Solving using C/                                     | 2023-2024 |
| UGCA1904        | Workshop on Desktop Publishing                               | 2023-2024 |
| UGCA1905        | Problem Solving using C Laboratory                           | 2023-2024 |
| UGCA1906        | Fundamentals of Computer and IT Laboratory                   | 2023-2024 |
| BTHU103/18      | English  | 2023-2024 |
| BTHU104/18      | English Practical/Laboratory                                 | 2023-2024 |
| HVPE101-18      | Human Values, De- addiction and Traffic Rules                | 2023-2024 |
| HVPE102-18      | Human Values, De- addiction and Traffic Rules (Lab/ Seminar) | 2023-2024 |
| BMPD102-18      | Mentoring and Professional Development                       | 2023-2024 |
| UGCA1907        | Fundamentals of Statistics                                   | 2023-2024 |
| UGCA1908        | Computer System Architecture                                 | 2023-2024 |
| UGCA1909        | Object Oriented Programming using C++                        | 2023-2024 |
| UGCA1910        | Object Oriented Programming using C++ Laboratory             | 2023-2024 |
| UGCA1911        | Fundamentals of Statistics Laboratory                        | 2023-2024 |
| UGCA1912        | Computer System Architecture Laboratory                      | 2023-2024 |
| EV5102-18       | Environmental Studies  | 2023-2024 |
| BMPD202-18      | Mentoring and Professional Development                       | 2023-2024 |
| UGCA1913        | Computer Networks  | 2023-2024 |
| UGCA1914        | Programming in Python  | 2023-2024 |
| UGCA1915        | Data Structures  | 2023-2024 |
| UGCA1916        | Computer Networks Laboratory                                 | 2023-2024 |
| UGCA1917        | Programming in Python Laboratory                             | 2023-2024 |
| UGCA1918        | Data Structures Laboratory                                   | 2023-2024 |
| UGCA1919        | PC Assembly & Troubleshooting                                | 2023-2024 |
| UGCA1920        | PC Assembly & Troubleshooting Laboratory                     | 2023-2024 |
| BMPD302-18      | Mentoring and Professional Development                       | 2023-2024 |
| UGCA1921        | Software Engineering   | 2023-2024 |
| UGCA1922        | Database Management Systems                                  | 2023-2024 |
| UGCA1923        | Operating Systems  | 2023-2024 |
| UGCA1924        | Software Engineering Laboratory                              | 2023-2024 |
| UGCA1925        | Database Management Systems Laboratory                       | 2023-2024 |
| UGCA1926        | Operating Systems Laboratory                                 | 2023-2024 |
| UGCA1927        | Web Designing  | 2023-2024 |
| UGCA1928        | Web Designing Laboratory                                     | 2023-2024 |
| BMPD402-18      | Mentoring and Professional Development                       | 2023-2024 |
| UGCA1929        | Programming in PHP   | 2023-2024 |
| UGCA1930        | Programming in PHP Laboratory                                | 2023-2024 |
| UGCA1936        | Open Elective-I  | 2023-2024 |
| UGCA1931        | Elective-I   | 2023-2024 |
| UGCA1934        | Elective-II  | 2023-2024 |
| UGCA1937        | Elective-I Laboratory  | 2023-2024 |
| UGCA1940        | Elective-II Laboratory                                       | 2023-2024 |
|                 | Project  | 2023-2024 |
| BMPD502-18      | Mentoring and Professional Development                       | 2023-2024 |
| UGCA1943        | Android Programming  | 2023-2024 |
| UGCA1944        | Android Programming Laboratory                               | 2023-2024 |
| UGCA1950        | Open Elective-II   | 2023-2024 |
| UGCA1945        | Elective-III   | 2023-2024 |
| UGCA1948        | Elective-IV  | 2023-2024 |
| UGCA1951        | Elective-III Laboratory                                      | 2023-2024 |
| UGCA1954        | Elective-IV Laboratory                                       | 2023-2024 |
|                 | Major Project  | 2023-2024 |
| BMPD602-18      | Mentoring and Professional Development                       | 2023-2024 |
| MTCS 101-18     | Mathematical foundations of Computer Science                 | 2023-2024 |
| MTCS 102-18     | Advanced Data Structures                                     | 2023-2024 |
| B, MTCS 106-18, | Program Elective I   | 2023-2024 |
| B, MTCS 109-18, | Program Elective II  | 2023-2024 |
| MTRM 101-18     | Research Methodology and IPR                                 | 2023-2024 |
| MTA-xx          | Audit Course   | 2023-2024 |
| MTCS 103-18     | Laboratory 1   | 2023-2024 |
| MTCS 104-18     | Laboratory 2   | 2023-2024 |
| MTCS 201-18     | Advance Algorithms   | 2023-2024 |
| MTCS 202-18     | Soft Computing   | 2023-2024 |
| B, MTCS 207-18, | Program Elective III   | 2023-2024 |
| B, MTCS 210-18, | Program Elective IV  | 2023-2024 |
| MTA-xxx         | Audit Course   | 2023-2024 |
| MTCS 203-18     | Laboratory 3   | 2023-2024 |

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M.Tech. CSE

|             |   |           |
|-------------|---|-----------|
| MTCS 204-18 | Laboratory 4  | 2023-2024 |
| MTCS 205-18 | Mini Project with Seminar                                       | 2023-2024 |
| BTME612-18  | Composite Materials   | 2023-2024 |
| BTME614-18  | Product Design and Development                                  | 2023-2024 |
| BTME409-18  | 4-weeks Industrial Training                                     | 2023-2024 |
| BTME401-18  | Applied Thermodynamics  | 2023-2024 |
| BTME406-18  | Applied Thermodynamics (Lab)                                    | 2023-2024 |
| BTME607-18  | Auto. Engg.(Lab)  | 2023-2024 |
| BTME702-18  | Automation in Manufacturing                                     | 2023-2024 |
| BTME-603-18 | Automobile Engineering  | 2023-2024 |
| BTME-607-18 | Automobile Engineering (Lab)                                    | 2023-2024 |
| BTME305-18  | Basic Thermodynamics  | 2023-2024 |
| BTCH-101-18 | Chemistry-I   | 2023-2024 |
| BTME502-18  | Design of Machine Elements                                      | 2023-2024 |
| BTPH-103-18 | Electromagnetism  | 2023-2024 |
| BTPH-113-18 | Electromagnetism Lab  | 2023-2024 |
| BTMC102-18  | Essence of Indian knowledge Tradition                           | 2023-2024 |
| BTME402-18  | Fluid Machines  | 2023-2024 |
| BTME407-18  | Fluid Machines (Lab))   | 2023-2024 |
| BTME301-18  | Fluid Mechanics   | 2023-2024 |
| BTME308-18  | Fluid Mechanics (Lab)   | 2023-2024 |
| BTME309-18  | Four Weeks Institutional Summer Vacation Training               | 2023-2024 |
| BTME703-18  | Fundamentals of Management for Engineers                        | 2023-2024 |
| GF-800      | General Fitness   | 2023-2024 |
| BTME501-18  | Heat Transfer   | 2023-2024 |
| BTME501-18  | Heat Transfer   | 2023-2024 |
| BTME505-18  | Heat Transfer (Lab)   | 2023-2024 |
| HU-251      | Human Resources and Management                                  | 2023-2024 |
| BTME-801    | Industrial Engineering and Management                           | 2023-2024 |
| BTME-IT-702 | Industrial Oriented Project /Industrial /Institutional Training | 2023-2024 |
| BTME-801    | Industrial Training   | 2023-2024 |
| BTME-604-18 | Introduction to Industrial management                           | 2023-2024 |
| BTME303-18  | Machine Drawing   | 2023-2024 |
| BTME-806    | Major Project   | 2023-2024 |
| BTME504-18  | Management and Engineering Economics                            | 2023-2024 |
| BTME503-18  | Manufacturing Processes   | 2023-2024 |
| BTME506-18  | Manufacturing Processes (Lab)                                   | 2023-2024 |
| BTME408-18  | Material Engineering (Lab)                                      | 2023-2024 |
| BTME404-18  | Materials Engineering   | 2023-2024 |
| BTAM101-18  | Mathematics I   | 2023-2024 |
| BTAM 203-18 | Mathematics II  | 2023-2024 |
| BTME-602-18 | Mechanical Measurements & Metrology                             | 2023-2024 |
| BTME-602-18 | Mechanical Measurements & Metrology                             | 2023-2024 |
| BTME-606-18 | Mechanical Measurements & Metrology (Lab)                       | 2023-2024 |
| BTME-805    | Mechanical Vibration Lab  | 2023-2024 |
| BTME-803    | Mechanical Vibrations   | 2023-2024 |
| BTME701-18  | Mechanical Vibrations   | 2023-2024 |
| BTPH103-18  | Mechanics of Solid  | 2023-2024 |
| BTPH111-18  | Mechanics of Solid Lab  | 2023-2024 |
| BMPD-201-18 | Mentoring and Professional Development                          | 2023-2024 |
| BMPD-101-18 | Mentoring and Professional Development                          | 2023-2024 |
| BMPD401-18  | Mentoring and Professional Development                          | 2023-2024 |
| BTME-608-18 | Minor Project   | 2023-2024 |
| BTME606-18  | MMM (Lab)   | 2023-2024 |
| BTME-615-18 | Non-Conventional Energy Resources                               | 2023-2024 |
| DE/PE-2.0   | Non-Traditional Machining                                       | 2023-2024 |
| BTME504-18  | Numerical Methods   | 2023-2024 |
| BTME507-18  | Numerical Methods (Lab)   | 2023-2024 |
| XXXX###-18  | Open Elective - I   | 2023-2024 |
| DE/ME-1.8   | Power Plant Engg  | 2023-2024 |
| XXXX###-18  | Professional Elective-I   | 2023-2024 |
| BTP5101-18  | Programming for Problem Solving                                 | 2023-2024 |
| BTP5102-18  | Programming for Problem Solving (Lab)                           | 2023-2024 |
| BTME704-18  | Project-II  | 2023-2024 |
| BTME605-18  | RAC (Lab)   | 2023-2024 |
| BTME-802    | Refrigeration & Air Conditioning                                | 2023-2024 |
| BTME-804    | Refrigeration & Air Conditioning Lab                            | 2023-2024 |
| BTME-601-18 | Refrigeration and Air conditioning                              | 2023-2024 |
| BTME601-18  | Refrigeration and Air conditioning                              | 2023-2024 |
| BTME-605-18 | Refrigeration and Air conditioning (Lab)                        | 2023-2024 |
| OECE-703-18 | Road Safety   | 2023-2024 |
| BTME-IT-701 | Software Training   | 2023-2024 |

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B.Tech. ME

|             |   |           |
|-------------|---|-----------|
| MTCS 204-18 | Laboratory 4  | 2023-2024 |
| MTCS 205-18 | Mini Project with Seminar                                       | 2023-2024 |
| BTME612-18  | Composite Materials   | 2023-2024 |
| BTME614-18  | Product Design and Development                                  | 2023-2024 |
| BTME409-18  | 4-weeks Industrial Training                                     | 2023-2024 |
| BTME401-18  | Applied Thermodynamics  | 2023-2024 |
| BTME406-18  | Applied Thermodynamics (Lab)                                    | 2023-2024 |
| BTME607-18  | Auto. Engg (Lab)  | 2023-2024 |
| BTME702-18  | Automation in Manufacturing                                     | 2023-2024 |
| BTME-603-18 | Automobile Engineering  | 2023-2024 |
| BTME-607-18 | Automobile Engineering (Lab)                                    | 2023-2024 |
| BTME305-18  | Basic Thermodynamics  | 2023-2024 |
| BTCH-101-18 | Chemistry-I   | 2023-2024 |
| BTME502-18  | Design of Machine Elements                                      | 2023-2024 |
| BTPH-103-18 | Electromagnetism  | 2023-2024 |
| BTPH-113-18 | Electromagnetism Lab  | 2023-2024 |
| BTMC102-18  | Essence of Indian knowledge Tradition                           | 2023-2024 |
| BTME402-18  | Fluid Machines  | 2023-2024 |
| BTME407-18  | Fluid Machines (Lab))   | 2023-2024 |
| BTME301-18  | Fluid Mechanics   | 2023-2024 |
| BTME308-18  | Fluid Mechanics (Lab)   | 2023-2024 |
| BTME309-18  | Four Weeks Institutional Summer Vacation Training               | 2023-2024 |
| BTME703-18  | Fundamentals of Management for Engineers                        | 2023-2024 |
| GF-800      | General Fitness   | 2023-2024 |
| BTME501-18  | Heat Transfer   | 2023-2024 |
| BTME501-18  | Heat Transfer   | 2023-2024 |
| BTME505-18  | Heat Transfer (Lab)   | 2023-2024 |
| HU-251      | Human Resources and Management                                  | 2023-2024 |
| BTME-801    | Industrial Engineering and Management                           | 2023-2024 |
| BTME-IT-702 | Industrial Oriented Project /Industrial /Institutional Training | 2023-2024 |
| BTME-801    | Industrial Training   | 2023-2024 |
| BTME-604-18 | Introduction to Industrial management                           | 2023-2024 |
| BTME303-18  | Machine Drawing   | 2023-2024 |
| BTME-806    | Major Project   | 2023-2024 |
| BTME504-18  | Management and Engineering Economics                            | 2023-2024 |
| BTME503-18  | Manufacturing Processes   | 2023-2024 |
| BTME506-18  | Manufacturing Processes (Lab)                                   | 2023-2024 |
| BTME408-18  | Material Engineering (Lab)                                      | 2023-2024 |
| BTME404-18  | Materials Engineering   | 2023-2024 |
| BTAM101-18  | Mathematics I   | 2023-2024 |
| BTAM 203-18 | Mathematics II  | 2023-2024 |
| BTME-602-18 | Mechanical Measurements & Metrology                             | 2023-2024 |
| BTME-602-18 | Mechanical Measurements & Metrology                             | 2023-2024 |
| BTME-606-18 | Mechanical Measurements & Metrology (Lab)                       | 2023-2024 |
| BTME-805    | Mechanical Vibration Lab  | 2023-2024 |
| BTME-803    | Mechanical Vibrations   | 2023-2024 |
| BTME701-18  | Mechanical Vibrations   | 2023-2024 |
| BTPH103-18  | Mechanics of Solid  | 2023-2024 |
| BTPH111-18  | Mechanics of Solid Lab  | 2023-2024 |
| BMPD-201-18 | Mentoring and Professional Development                          | 2023-2024 |
| BMPD-101-18 | Mentoring and Professional Development                          | 2023-2024 |
| BMPD401-18  | Mentoring and Professional Development                          | 2023-2024 |
| BTME-608-18 | Minor Project   | 2023-2024 |
| BTME606-18  | MMM (Lab)   | 2023-2024 |
| BTME-615-18 | Non-Conventional Energy Resources                               | 2023-2024 |
| DE/PE-2.0   | Non-Traditional Machining                                       | 2023-2024 |
| BTME504-18  | Numerical Methods   | 2023-2024 |
| BTME507-18  | Numerical Methods (Lab)   | 2023-2024 |
| XXXX###-18  | Open Elective - I   | 2023-2024 |
| DE/ME-1.8   | Power Plant Engg  | 2023-2024 |
| XXXX###-18  | Professional Elective-I   | 2023-2024 |
| BTPS101-18  | Programming for Problem Solving                                 | 2023-2024 |
| BTPS102-18  | Programming for Problem Solving (Lab)                           | 2023-2024 |
| BTME704-18  | Project-II  | 2023-2024 |
| BTME605-18  | RAC (Lab)   | 2023-2024 |
| BTME-802    | Refrigeration & Air Conditioning                                | 2023-2024 |
| BTME-804    | Refrigeration & Air Conditioning Lab                            | 2023-2024 |
| BTME-601-18 | Refrigeration and Air conditioning                              | 2023-2024 |
| BTME601-18  | Refrigeration and Air conditioning                              | 2023-2024 |
| BTME-605-18 | Refrigeration and Air conditioning (Lab)                        | 2023-2024 |
| OECE-703-18 | Road Safety   | 2023-2024 |
| BTME-IT-701 | Software Training   | 2023-2024 |

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B.Tech. ME

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|------------|------------------------------------|-----------|
| BTME-801   | Software Training                  | 2023-2024 |
| BTME306-18 | Strength of Material (Lab)         | 2023-2024 |
| BTME306-18 | Strength of Material Lab           | 2023-2024 |
| BTME304-18 | Strength of Materials-I            | 2023-2024 |
| BTME403-18 | Strength of Materials-II           | 2023-2024 |
| BTME307-18 | Theory of Machine (Lab)            | 2023-2024 |
| BTME302-18 | Theory of Machines - I             | 2023-2024 |
| BTME307-18 | Theory of Machines Lab             | 2023-2024 |
| BTME405-18 | Theory of Machines-II              | 2023-2024 |
| BTMP101-18 | Workshop / Manufacturing Practices | 2023-2024 |

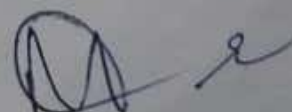
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## 3.1 Number of courses in all programmes during the year 2023-24

| S. No | Sub Code    | Subject Name                             | session         | Course       |
|-------|-------------|--|-----------------|--------------|
| 1     | BTCH101-18  | Chemistry – 1                            | Jan - June 2023 | B.Tech (CSE) |
| 2     | BTCH102-18  | Chemistry – 1 (Lab)                      | Jan - June 2023 |              |
| 3     | BTAMXX-18   | Math – II                                | Jan - June 2023 |              |
| 4     | BTPS101-18  | Programming for problem Solving (T)      | Jan - June 2023 |              |
| 5     | BTPS102-18  | Programming for problem Solving Lab –    | Jan - June 2023 |              |
| 6     | BTMP101-18  | Workshop / Manufacturing Practices       | Jan - June 2023 |              |
| 7     | BTHU101-18  | English                                  | Jan - June 2023 |              |
| 8     | BTHU102-18  | English Lab                              | Jan - June 2023 |              |
| 9     | BMPD201-18  | Mentoring & Professional Development     | Jan - June 2023 |              |
| 10    | BTCS 401-18 | Discrete Mathematics                     | Jan - June 2023 | B.Tech (CSE) |
| 11    | BTCS 402-18 | Operating System                         | Jan - June 2023 |              |
| 12    | BTCS 404-18 | Operating System Lab                     | Jan - June 2023 |              |
| 13    | BTCS 403-18 | Design & analysis of Algorithm           | Jan - June 2023 |              |
| 14    | BTCS 405-18 | Design & analysis of Algorithm Lab       | Jan - June 2023 |              |
| 15    | HSMC 122-18 | Universal Human Values 2                 | Jan - June 2023 |              |
| 16    | EVS 101-18  | Environmental Sciences                   | Jan - June 2023 |              |
| 17    | BTES 401-18 | Computer Organization & Architecture     | Jan - June 2023 |              |
| 18    | BTES 402-18 | Computer Organization & Architecture Lab | Jan - June 2023 |              |
| 19    | BTCS 601-18 | Compiler Design                          | Jan - June 2023 | B.Tech (CSE) |
| 20    | BTCS 604-18 | Compiler Design Lab –                    | Jan - June 2023 |              |
| 21    | BTCS 602-18 | Artificial Intelligence                  | Jan - June 2023 |              |
| 22    | BTCS 605-18 | Artificial Intelligence Lab              | Jan - June 2023 |              |
| 23    | BTCSUUU-18  | Cloud Computing ( Elective – II )        | Jan - June 2023 |              |
| 24    | BTCSUUU-18  | Cloud Computing ( Elective – II ) Lab    | Jan - June 2023 |              |
| 25    | BTCSYYY-18  | Machine Learning ( Elective – III )      | Jan - June 2023 |              |
| 26    | BTCSYYY-18  | Machine Learning ( Elective – III ) Lab  | Jan - June 2023 |              |
| 27    | BTOE        | Open Elective                            | Jan - June 2023 |              |
| 28    | BTCS 603-18 | Project – 1                              | Jan - June 2023 | B.Tech (CSE) |
| 29    | BTCS 801-18 | Semester Training                        | Jan - June 2023 |              |
| 30    | BTPHXX-18   | Physics                                  | July - Dec 2022 |              |
| 31    | BTPHXX-18   | Physics (Lab )                           | July - Dec 2022 | B.Tech (CSE) |
| 32    | BTAMXX-18   | Math – 1                                 | July - Dec 2022 |              |
| 33    | BTEE102-18  | Basic Electrical Engg                    | July - Dec 2022 |              |
| 34    | BTEE102-18  | Basic Electrical Engg (Lab)              | July - Dec 2022 |              |
| 35    | BTME101-21  | Engg. Graphics & Design                  | July - Dec 2022 |              |
| 36    | UTPD101-18  | Mentoring and Professional Development   | July - Dec 2022 |              |
| 37    | BTES301-18  | Digital Electronics                      | July - Dec 2022 |              |
| 38    | BTES302-18  | Digital Electronics (Lab)                | July - Dec 2022 | B.Tech (CSE) |
| 39    | BTCS301-18  | Data Structure & Algorithm               | July - Dec 2022 |              |
| 40    | BTCS303-18  | Data Structure & Algorithm (Lab)         | July - Dec 2022 |              |
| 41    | BTCS302-18  | OOPs                                     | July - Dec 2022 |              |
| 42    | BTCS304-18  | OOPs (Lab)                               | July - Dec 2022 |              |
| 43    | BTAM304-18  | Mathematics III                          | July - Dec 2022 |              |

|    |                |   |                 |              |              |
|----|----------------|---|-----------------|--------------|--------------|
| 44 | HSMC101/102-18 | Foundation Course in Humanities                                 | July - Dec 2022 | B.Tech (CSE) |              |
| 45 |                | (Development of Societies / Philosophy)                         | July - Dec 2022 |              |              |
| 46 | BTCSS05-18     | IT Workshop   | July - Dec 2022 |              |              |
| 47 |                | Summer Institutional Training                                   | July - Dec 2022 |              |              |
| 48 | BTESS01-18     | Enterprise Resource Planning                                    | July - Dec 2022 |              |              |
| 49 | BTCSS01-18     | Database Management Systems                                     | July - Dec 2022 |              |              |
| 50 | BTCSS05-18     | Database Management Systems (Lab)                               | July - Dec 2022 |              |              |
| 51 | BTCSS02-18     | Formal Language & Automata Theory                               | July - Dec 2022 |              |              |
| 52 | BTCSS03-18     | Software Engineering  | July - Dec 2022 |              |              |
| 53 | BTCSS06-18     | Software Engineering (Lab)                                      | July - Dec 2022 |              |              |
| 54 | BTCSS04-18     | Computer Networks   | July - Dec 2022 |              |              |
| 55 | BTCSS07-18     | Computer Networks (Lab)   | July - Dec 2022 |              |              |
| 56 | BTCSS10-18     | Prog. in Python (E - 1)   | July - Dec 2022 |              |              |
| 57 | BTCSS13-18     | Prog. In Python(E - 1) (Lab)                                    | July - Dec 2022 |              |              |
| 58 | MC             | Constitution of India / Essence of Indian Traditional Knowledge | July - Dec 2022 |              |              |
| 59 |                | Industrial Training   | July - Dec 2022 |              |              |
| 60 | BTCSS701-18    | Network Security & Cryptography                                 | July - Dec 2022 |              | B.Tech (CSE) |
| 61 | BTCSS702-18    | Data Mining & Data Warehousing                                  | July - Dec 2022 |              |              |
| 62 | BTCSS704-18    | Deep Learning (E - IV)  | July - Dec 2022 |              |              |
| 63 | BTCSS705-18    | Deep Learning (E - IV) - (Lab)                                  | July - Dec 2022 |              |              |
| 64 | BTCSS712-18    | Block Chain (E - V)   | July - Dec 2022 |              |              |
| 65 | BTCSS712-18    | Block Chain (E - V) (Lab)                                       | July - Dec 2022 |              |              |
| 66 | BTOE ****      | Open Elective II  | July - Dec 2022 |              |              |
| 67 | BTCSS703-18    | Project - II  | July - Dec 2022 | BCA          |              |
| 68 | UGCA1901       | Mathematics   | July-Dec 2023   |              |              |
| 69 | UGCA1902       | Fundamentals of Computer and IT                                 | July-Dec 2023   |              |              |
| 70 | UGCA1903       | Problem Solving using C   | July-Dec 2023   |              |              |
| 71 | UGCA1904       | Workshop on Desktop Publishing                                  | July-Dec 2023   |              |              |
| 72 | UGCA1905       | Problem Solving using C Laboratory                              | July-Dec 2023   |              |              |
| 73 | UGCA1906       | Fundamentals of Computer and IT Laboratory                      | July-Dec 2023   |              |              |
| 74 | BTHU103/18     | English   | July-Dec 2023   |              |              |
| 75 | BTHU104/18     | English Practical/Laboratory                                    | July-Dec 2023   |              |              |
| 76 | HVPE101-18     | Human Values, De-addiction and Traffic Rules                    | July-Dec 2023   |              |              |
| 77 | HVPE102-18     | Human Values, De-addiction and Traffic Rules (Lab/ Seminar)     | July-Dec 2023   |              |              |
| 78 | BMPD102-18     | Mentoring and Professional Development                          | July-Dec 2023   |              |              |
| 79 | UGCA1907       | Fundamentals of Statistics                                      | Jan-June 2024   |              |              |
| 80 | UGCA1908       | Computer System Architecture                                    | Jan-June 2024   |              |              |
| 81 | UGCA1909       | Object Oriented Programming using C++                           | Jan-June 2024   |              |              |
| 82 | UGCA1910       | Object Oriented Programming using C++ Lab                       | Jan-June 2024   |              |              |
| 83 | UGCA1911       | Fundamentals of Statistics Laboratory                           | Jan-June 2024   |              |              |
| 84 | UGCA1912       | Computer System Architecture Laboratory                         | Jan-June 2024   |              |              |
| 85 | EVS102-18      | Environmental Studies   | Jan-June 2024   |              |              |
| 86 | BMPD202-18     | Mentoring and Professional Development                          | Jan-June 2024   |              |              |

Director  
I.K.Gujral-Punjab Technical University  
Mohali Campus-1



3.1 List of courses offered across all programs during last year

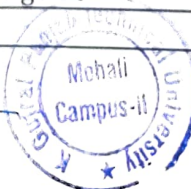
| Program code | Program name | Course code     | Course name  | Year of offering the course |
|--------------|--------------|-----------------|--|-----------------------------|
| B. ARCH.2021 | B. ARCH      | BARCH-101/21    | Architectural Design & Theory-I                                | 2023-24                     |
| 2            | B. ARCH      | BARCH-102/21    | Architectural Drawing-I  | 2023-24                     |
| 2            | B. ARCH      | BARCH-103/21    | Architectural Graphics-I                                       | 2023-24                     |
| 2            | B. ARCH      | BARCH-104/21    | Workshop-I   | 2023-24                     |
| 2            | B. ARCH      | BARCH-105/21    | Building Construction & Materials-I                            | 2023-24                     |
| 2            | B. ARCH      | BARCH-106/21    | Theory of Structure- I   | 2023-24                     |
| 2            | B. ARCH      | BTHU-101/18     | Communicative English  | 2023-24                     |
| 2            | B. ARCH      | BTHU-102/18     | Communicative Skill Laboratory                                 | 2023-24                     |
| 2            | B. ARCH      | HSMC-122/18     | Human Values and Professional Ethics                           | 2023-24                     |
| 2            | B. ARCH      | BARCH-107/21    | Life skills-I  | 2023-24                     |
| 2            | B. ARCH      | BARCH-201/21    | Architectural Design-II  | 2023-24                     |
| 2            | B. ARCH      | BARCH-202/21    | Architectural Drawing-II                                       | 2023-24                     |
| 2            | B. ARCH      | BARCH-203/21    | Architectural Graphics-II                                      | 2023-24                     |
| 2            | B. ARCH      | BARCH-204/21    | History of Architecture-I                                      | 2023-24                     |
| 2            | B. ARCH      | BARCH-205/21    | Workshop-II  | 2023-24                     |
| 2            | B. ARCH      | BARCH-206/21    | Building Construction and Materials-II                         | 2023-24                     |
| 2            | B. ARCH      | BARCH-207/21    | Theory of Design-I   | 2023-24                     |
| 2            | B. ARCH      | BARCH-208/21    | Computer Application-I   | 2023-24                     |
| 2            | B. ARCH      | BARCH-209/21    | Mentoring and Professional Development-I                       | 2023-24                     |
| 2            | B.ARCH.      | —————           | Educational Tour I/ Summer Training-I/Vacation Assignment-I    | 2023-24                     |
| 2            | B.ARCH.      | UC/BARCH-302/19 | Architectural Graphics/Presentation - III                      | 2023-24                     |
| 2            | B.ARCH.      | UC/BARCH-303/19 | Building Construction & Materials-III                          | 2023-24                     |
| 2            | B.ARCH.      | UC/BARCH-304/19 | Structure Systems-II   | 2023-24                     |
| 2            | B.ARCH.      | UC/BARCH-305/19 | Structure Design-I   | 2023-24                     |
| 2            | B.ARCH.      | UC/BARCH-306/19 | Surveying & Leveling   | 2023-24                     |
| 2            | B.ARCH.      | UC/BARCH-307/19 | Climate & Architecture-I                                       | 2023-24                     |
| 2            | B.ARCH.      | UC/BARCH-308/19 | Computer Application-I   | 2023-24                     |
| 2            | B.ARCH.      | UC/BARCH-309/19 | * Educational Tour I/Summer Training-I / Vacation Assignment-I | 2023-24                     |
| 2            | B.ARCH.      | UC/BARCH-401/19 | Architectural Design -IV                                       | 2023-24                     |
| 2            | B.ARCH.      | UC/BARCH-402/19 | History of Architecture-II                                     | 2023-24                     |
| 2            | B.ARCH.      | UC/BARCH-403/19 | Building Construction & Materials-IV                           | 2023-24                     |
| 2            | B.ARCH.      | UC/BARCH-404/19 | Structure Design-II  | 2023-24                     |
| 2            | B.ARCH.      | UC/BARCH-405/19 | Building Services-I  | 2023-24                     |
| 2            | B.ARCH.      | UC/BARCH-406/19 | Climate & Architecture-II                                      | 2023-24                     |
| 2            | B.ARCH.      | UC/BARCH-407/19 | Computer Application-II  | 2023-24                     |



| Program code | Program name | Course code         | Course name  | Year of offering the course |
|--------------|--------------|---------------------|--|-----------------------------|
| 2            | B.ARCH.      | UC/BARCH-408/19     | Mentoring and Professional                         | 2023-24                     |
| 2            | B.ARCH.      | UC/BARCH-409/19     | Constitutional Law                                 | 2023-24                     |
| 2            | B.ARCH.      | UC/BARCH-501/19     | Architectural Design-V                             | 2023-24                     |
| 2            | B.ARCH.      | UC/BARCH-502/19     | Building Construction & Materials-V                | 2023-24                     |
| 2            | B.ARCH.      | UC/BARCH-503/19     | Structure Systems-III                              | 2023-24                     |
| 2            | B.ARCH.      | UC/BARCH-504/19     | Structure Design-III                               | 2023-24                     |
| 2            | B.ARCH.      | UC/BARCH-505/19     | Building Services-II                               | 2023-24                     |
| 2            | B.ARCH.      | UC/BARCH-506/19     | Theory of Design-III                               | 2023-24                     |
| 2            | B.ARCH.      | UC/BARCH-507/19     | Landscape Architecture                             | 2023-24                     |
| 2            | B.ARCH.      | UC/BARCH-509        | Hill Architecture                                  | 2023-24                     |
| 2            | B.ARCH.      | UC/BARCH-513        | Sociology for Architects/Fundamentals of Sociology | 2023-24                     |
| 2            | B.ARCH.      | UC/BARCH-514        | Health Education-I                                 | 2023-24                     |
| 2            | B.ARCH.      | UC/BARCH-515        | Music(Vocal, Instrumental)                         | 2023-24                     |
| 2            | B.ARCH.      | UC/BARCH-516        | Laser/Printing Technology                          | 2023-24                     |
| 2            | B.ARCH.      | UC/BARCH-517        | Creative Writing                                   | 2023-24                     |
| 2            | B.ARCH.      | UC/BARCH-518/19     | Educational Tour II/Summer Training-II             | 2023-24                     |
| 2            | B.ARCH.      | UC/BARCH-601/19     | Architectural Design -VI                           | 2023-24                     |
| 2            | B.ARCH.      | UC/BARCH-602/19     | History of Architecture-IV                         | 2023-24                     |
| 2            | B.ARCH.      | UC/BARCH-603/19     | Estimating Costing & Specifications                | 2023-24                     |
| 2            | B.ARCH.      | UC/BARCH-604/19     | Architecture Legislation                           | 2023-24                     |
| 2            | B.ARCH.      | UC/BARCH-605/19     | Building Construction & Materials-VI               | 2023-24                     |
| 2            | B.ARCH.      | UC/BARCH-606/19     | Structure Design (Project )-IV                     | 2023-24                     |
| 2            | B.ARCH.      | UC/BARCH-607/19     | Building Services-III                              | 2023-24                     |
| 2            | B.ARCH.      | UC/BARCH-608/19     | Climate & Architecture (Sustainable Design)-III    | 2023-24                     |
| 2            | B.ARCH.      | UC/BARCH-609 (A)/19 | Sustainable Cities & Communities                   | 2023-24                     |
| 2            | B.ARCH.      | UC/BARCH-612/19     | Psychology for Architects                          | 2023-24                     |
| 2            | B.ARCH.      | UC/BARCH-613/19     | Health Education-II                                | 2023-24                     |
| 2            | B.ARCH.      | UC/BARCH-615/19     | Mentoring and Professional Development-III         | 2023-24                     |
| 2            | B.ARCH.      | UC/BARC-610/19      | Low-Cost effective Building Design                 | 2023-24                     |
| 2            | B.ARCH.      | UC/BARC-611/19      | Interior Design                                    | 2023-24                     |
| 2            | B.ARCH.      | UC/BARC-614/19      | Lighting Design                                    | 2023-24                     |
| 2            | B.ARCH.      | BACH-701            | Practical Training Programme                       | 2023-24                     |
| 2            | B.ARCH.      | BACH-801            | Architectural Design-VII                           | 2023-24                     |
| 2            | B.ARCH.      | BACH-802            | Building Construction & Materials-VII              | 2023-24                     |
| 2            | B.ARCH.      | BACH-803            | Urban Design - I                                   | 2023-24                     |
| 2            | B.ARCH.      | BACH-804            | Housing - I  | 2023-24                     |
| 2            | B.ARCH.      | BACH-805            | High Rise Buildings - I                            | 2023-24                     |
| 2            | B.ARCH.      | BACH-806 to 808     | Elective-I   | 2023-24                     |

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|--------------|--------------|------------------------|--|-----------------------------|
| 2            | B.ARCH.      | BACH-901               | Architectural Design-VIII                                      | 2023-24                     |
| 2            | B.ARCH.      | BACH-902               | Building Construction & Materials-VIII                         | 2023-24                     |
| 2            | B.ARCH.      | BACH-903               | Town Planning-I  | 2023-24                     |
| 2            | B.ARCH.      | BACH-904               | Building Economics-I   | 2023-24                     |
| 2            | B.ARCH.      | BACH-905               | Hill Architecture-I  | 2023-24                     |
| 2            | B.ARCH.      | BACH-907               | Traffic and Transportation-I                                   | 2023-24                     |
| 2            | B.ARCH.      | BACH-1001              | Architectural Design - IX (Thesis -                            | 2023-24                     |
| 2            | B.ARCH.      | BACH-1002              | Construction Management-I                                      | 2023-24                     |
| 2            | B.ARCH.      | BACH-1003              | Professional Practice -I                                       | 2023-24                     |
| 2            | B.ARCH.      | BACH-1004              | Disaster Management -I   | 2023-24                     |
| 355          | M. ARCH.     | UC/MARCH-101/20        | Studio I   | 2023-24                     |
| 355          | M. ARCH.     | UC/MARCH-102/20        | Contemporary Architecture- I                                   | 2023-24                     |
| 355          | M. ARCH.     | UC/MARCH-103/20        | Educational Technology   | 2023-24                     |
| 355          | M. ARCH.     | UC/MARCH-104/20        | Research Methodology - I                                       | 2023-24                     |
| 355          | M. ARCH.     | UC/MARCH/ PE-106-10/20 | Fundamentals of the built environment and resource             | 2023-24                     |
| 355          | M. ARCH.     | UC/MARCH-201/20        | Studio II  | 2023-24                     |
| 355          | M. ARCH.     | UC/MARCH-202/20        | Contemporary Architecture - II                                 | 2023-24                     |
| 355          | M. ARCH.     | UC/MARCH-203/20        | Psychology of Learning and Teaching                            | 2023-24                     |
| 355          | M. ARCH.     | UC/MARCH-204/20        | Architecture Research Methodology - II                         | 2023-24                     |
| 355          | M. ARCH.     | UC/MARCH-206-10/20     | Elective I (Architecture Appreciation)                         | 2023-24                     |
| 355          | M. ARCH.     |                        | * Educational Tour I/Summer Training-I / Vacation Assignment-I | 2023-24                     |
| 523          | M. PLAN.     | UC-MURP101             | Planning Studio - I  | 2023-24                     |
| 523          | M. PLAN.     | UC-MURP102             | Geoinformatics Systems - I                                     | 2023-24                     |
| 523          | M. PLAN.     | UC-MURP103             | History of Human Settlements                                   | 2023-24                     |
| 523          | M. PLAN.     | UC-MURP104             | Planning Techniques and Quantitative Methods                   | 2023-24                     |
| 523          | M. PLAN.     | UC-MURP105             | Environment Planning   | 2023-24                     |
| 523          | M. PLAN.     | UC-MURP106             | Infrastructure Planning -I                                     | 2023-24                     |
| 523          | M. PLAN.     | UC-MURP107             | Socio-Economic Planning  | 2023-24                     |
| 523          | M. PLAN.     | UC-MURP201             | Planning Studio - II   | 2023-24                     |
| 523          | M. PLAN.     | UC-MURP202             | Geoinformatics Systems - II                                    | 2023-24                     |
| 523          | M. PLAN.     | UC-MURP203             | City and Metropolitan Planning                                 | 2023-24                     |
| 523          | M. PLAN.     | UC-MURP204             | Infrastructure Planning -II                                    | 2023-24                     |
| 523          | M. PLAN.     | UC-MURP205             | Planning Legislations and Governance                           | 2023-24                     |
| 523          | M. PLAN.     | UC/MURP-202 to 209/19  | Elective   | 2023-24                     |
| 523          | M. PLAN.     | UC/MURP-301/19         | Planning Studio - III (Regional Planning)                      | 2023-24                     |
| 523          | M. PLAN.     | UC/MURP-302/19         | Regional Planning  | 2023-24                     |
| 523          | M. PLAN.     | UC/MURP-303/19         | Research Methodology   | 2023-24                     |
| 523          | M. PLAN.     | UC/MURP-304/19         | Review of Professional Training                                | 2023-24                     |
| 523          | M. PLAN.     | UC/MURP-305/19         | Professional Elective  | 2023-24                     |

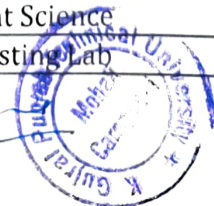
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| Program code | Program name  | Course code    | Course name   | Year of offering the course |
|--------------|---------------|----------------|---|-----------------------------|
| 523          | M. PLAN.      | UC/MURP-306/19 | Open Elective-I                                       | 2023-24                     |
| 523          | M. PLAN.      | UC-MURP401     | Planning Thesis                                       | 2023-24                     |
| 523          | M. PLAN.      | UC-MURP402     | Open Elective-II                                      | 2023-24                     |
| 2            | B. ARCH.      | BARCH-301/21   | Architectural Design-III                              | 2023-24                     |
| 2            | B. ARCH       | BARCH-302/21   | Architectural Presentation-I                          | 2023-24                     |
| 2            | B. ARCH       | BARCH-303/21   | History of Architecture-II                            | 2023-24                     |
| 2            | B. ARCH       | BARCH-304/21   | Building Construction and Materials-II                | 2023-24                     |
| 2            | B. ARCH       | BARCH-305/21   | Structure Design - I                                  | 2023-24                     |
| 2            | B. ARCH       | BARCH-306/21   | Surveying and Levelling - I                           | 2023-24                     |
| 2            | B. ARCH       | BARCH-307/21   | Theory of Design-III                                  | 2023-24                     |
| 2            | B. ARCH       | BARCH-308/21   | Computer Application-II                               | 2023-24                     |
| 2            | B. ARCH       | BARCH-309/21   | Life skills-II  | 2023-24                     |
| 2            | B. ARCH.      | BARCH-310/21   | Educational Tour/Summer Training                      | 2023-24                     |
| 2            | B. ARCH.      | BARCH-401/21   | Architectural Design-IV                               | 2023-24                     |
| 2            | B. ARCH       | BARCH-402/21   | Building Construction and Materials-IV                | 2023-24                     |
| 2            | B. ARCH       | BARCH-403/21   | Structure System - I                                  | 2023-24                     |
| 2            | B. ARCH       | BARCH-404/21   | Structure Design - II                                 | 2023-24                     |
| 2            | B. ARCH       | BARCH-405/21   | Building Services - I                                 | 2023-24                     |
| 2            | B. ARCH       | BARCH-406/21   | Climate and Architecture -I                           | 2023-24                     |
| 2            | B. ARCH       | BARCH-407/21   | Elective  | 2023-24                     |
| 2            | B. ARCH       | BARCH-408/21   | Computer Application-III                              | 2023-24                     |
| 2            | B. ARCH       | BARCH-409/21   | Mentoring and Professional Development-II             | 2023-24                     |
| 2            | B. ARCH.      | BARCH-410/21   | Educational Tour/Summer Training                      | 2023-24                     |
| 3            | B. Tech Civil | BTCE-301-18    | Surveying & Geomatics                                 | 2023-24                     |
| 3            | B. Tech Civil | BTCE-302-18    | Solid Mechanics                                       | 2023-24                     |
| 3            | B. Tech Civil | BTCE-303-18    | Fluid Mechanics                                       | 2023-24                     |
| 3            | B. Tech Civil | BTAM-301-18    | Mathematics III                                       | 2023-24                     |
| 3            | B. Tech Civil | BTEC-305-18    | Basic Electronics & applications in Civil Engineering | 2023-24                     |
| 3            | B. Tech Civil | HSMC-132-18    | Civil Engg.- Introduction, societal & Global Impact   | 2023-24                     |
| 3            | B. Tech Civil | BTCE-306-18    | Surveying & Geomatics Lab                             | 2023-24                     |
| 3            | B. Tech Civil | BTCE-307-18    | Fluid Mechanics Lab                                   | 2023-24                     |
| 3            | B. Tech Civil | BTCE-308-18    | Solid Mechanics Lab                                   | 2023-24                     |
| 3            | B. Tech Civil | BMPD-301-18    | Mentoring and Professional Practices                  | 2023-24                     |
| 3            | B. Tech Civil | BTCE-401-18    | Concrete Technology                                   | 2023-24                     |
| 3            | B. Tech Civil | BTCE-402-18    | Material, Testing & Evaluation                        | 2023-24                     |
| 3            | B. Tech Civil | BTCE-403-18    | Hydrology & Water Resources                           | 2023-24                     |
| 3            | B. Tech Civil | BTCE-404-18    | Transportation Engineering                            | 2023-24                     |
| 3            | B. Tech Civil | BTCE-405-18    | Disaster Preparedness & Planning                      | 2023-24                     |
| 3            | B. Tech Civil | EVS-101-18     | Environment Science                                   | 2023-24                     |
| 3            | B. Tech Civil | BTCE-406-18    | Concrete Testing Lab                                  | 2023-24                     |

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| Program code | Program name  | Course code | Course name                          | Year of offering the course |
|--------------|---------------|-------------|--------------------------------------|-----------------------------|
| 3            | B. Tech Civil | BTCE-407-18 | Transportation Lab                   | 2023-24                     |
| 3            | B. Tech Civil | BMPD-401-18 | Mentoring and Professional Practices | 2023-24                     |
| 3            | B. Tech Civil | BTCE-432-18 | Training -II                         | 2023-24                     |

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