

**Model Curriculumfor B.Voc/
D.Voc
in
Graphics & Multimedia
Batch 2025**



**AllIndiaCouncil forTechnicalEducation Nelson
Mandela Marg, New Delhi**

1. Introduction

All India Council for Technical Education (AICTE) Ministry of HRD, Government of India has introduced Entrepreneurship oriented Skill development courses of B.Voc/D.Voc/Skill Diploma. These courses will be run by AICTE approved institutes by using available infrastructure and facilities. In these courses the institute will conduct general education content and sector specific skills will be imparted by Skill Knowledge Providers/ Training Providers/ Industries.

Key Features:

Objectives

- To provide judicious mix of skills relating to a profession and appropriate content of General Education.
- To ensure that the students have adequate knowledge and skills, so that they are work ready at each exit point of the programme.
- To provide flexibility to the students by means of pre-defined entry and multiple exit points.
- To integrate NSQF within the Diploma, undergraduate level of higher education to enhance employability of the students and meet industry requirements. Such student apart from meeting the needs of local and national industry are also expected to be equipped to become part of the global workforce.
- To provide vertical mobility to students admitted in such vocational courses.
- The certification levels will lead to Diploma/Advanced Diploma/B.Voc.Degree in Graphics & Multimedia and will be offered by respective affiliating University/Board of Technical Education.
- Students may be awarded Level Certificate/Diploma/Advance Diploma /Degree as outlined in the Table below:

Award	Duration after class X	Corresponding NSQF level
Level 3 Certificate	1 Year	3
Level 4 Certificate	2 Years	4
Diploma	3 Year	5
Advance Diploma	4 Years	6
B.Voc Degree	5 Years	7

2. Course Objectives

After successfully completing the vocational course, the student would have acquired relevant appropriate and adequate technical knowledge together with the professional skills and competencies in the field of Graphics & Multimedia so that he/she is properly equipped to take up gainful employment in this Vocation. Thus he/she should have

acquired:-

A. Adequate Professional Skills and Competencies in

- (a) Testing different 2D/3D components.
- (b) Testing the performance of Graphics & Multimedia.
- (c) Locating the fault at component level and at the stage level.

B. A Healthy and Professional Attitudes that He/She has

- (a) An analytical approach while working on a job.
- (b) An open mind while locating/rectifying faults.
- (c) Respect for working with his/her own hands.
- (d) Respect for honesty, punctuality and truthfulness

c. NSQF compliant skills in Qualification developed by sector skill council in Media sector

2. Course Structure

The course will consist of combination of practice, theory and hands-on skills in the Graphics & Multimedia sector.

Curriculum

The curriculum in each of the years of the programme would be a suitable mix of general education and skill components.

Skill Components:

- The focus of skill components shall be to equip students with appropriate knowledge, practice and attitude, to become work ready. The skill components will be relevant to the industry as per its requirements.
- The curriculum will necessarily embed within itself, National Occupational Standards (NOSs) of specific job roles within the industry. This would enable the students to meet the learning outcomes specified in the NOSs.
- The overall design of the skill development component along with the job roles selected will be such that it leads to a comprehensive specialization in few domains.
- The curriculum will focus on work-readiness skills in each of the years of training.
- Adequate attention will be given in curriculum design to practical work, on the job training, development of student portfolios and project work.

General Education Component:

- The general education component adhere to the normal senior secondary and university standards. It will emphasize and offer courses which provide holistic development. However, it will not exceed 40% of the total curriculum.
- Adequate emphasis is given to language and communications skills.

The curriculum is designed in a manner that at the end of each year after class Xth students can meet below mentioned level descriptors of NSQF:

Level	Process required	Professional Knowledge	Professional skill	Core skill	Responsibility
Level 3	Person may carry out a job which may require limited range of activities routine and predictable	Basic facts, process and principle applied in trade of employment	Recall and demonstrate practical skill, routine and repetitive in narrow range of application	Communication written and oral with minimum required clarity, skill of basic arithmetic and algebraic principles, personal banking, basic understanding of social and natural environment	Under close supervision some responsibility for own work within defined limit
Level 4	Work in familiar, predictable, routine, situation of clear choice	Factual knowledge of field of knowledge or study	Recall and demonstrate practical skill, routine and repetitive in narrow range of application, using appropriate rule and tool, using quality concepts	Language to communicate written or oral, with required clarity, skill to basic arithmetic and algebraic principles, basic understanding of social, political and natural environment	Responsibility for own work and learning
Level 5	Job that requires well developed skill, with clear choice of procedures in familiar context	Knowledge of facts, principles, processes and general concepts, in a field of work or study	A range of cognitive and practical skills required to accomplish tasks and solve problems by selecting and applying basic methods, tools materials and information	Desired mathematical skill, understanding of social, political and some skill of collecting and organizing information, communication.	Responsibility for own work and learning and some responsibility for other's work and learning

Level 6	Demands wide range of specialized technical skill, clarity of knowledge and practice in broad range of activity involving standard/ non-standard practices	Factual and theoretical knowledge in broad contexts within a field of work or study	A range of cognitive and practical skills required to generate solutions to specific problems in a field of work or study	Reasonably good in mathematical calculation, understanding of social, political and reasonably good in data collecting, organizing information, and logical communication	Responsibility for own work and learning and full responsibility for other's work and learning
Level 7	Requires a command of wide ranging specialized theoretical and practical skill, involving variable routine and non-routine context	Wide ranging, factual and theoretical knowledge in broad contexts within a field of work or study	Wide range of cognitive and practical skills required to generate solutions to specific problems in a field of work or study	Good logical and mathematical skill understanding of social, political and natural environment good in collecting and organizing information, communication and presentation skill	Full responsibility for output of group and development

CurriculumforGraphics&Multimedia

Level	Code	EducationalComponent		Credit	Marks
3 Semester I		Theory			
	3.GE.01	Language-I		3	50
	3.GE.02	Applied Chemistry		3	50
	3.GE.03	Applied Physics		3	50
	3.GE.04	AppliedMathematics-I		3	50
		Lab/Practical			
	3.GP.01	AppliedChemistryLab		1.5	50
	3.GP.02	AppliedPhysicsLab		1.5	50
	On-Job-Training(OJT)/QualificationPacks				
	SetPainterMES/Q3104		(Anyone)	15	200
	SoundAssistantMES/Q3403				
	Clean-upArtistMES/Q0506				
	RotoArtistMES/Q3504				
3 Semester II	Theory				
	3.GV.01	GeneralFoundationCourse-I		3	50
	3.GV.02	ITTools(795)		3	50
	3.GV.03	Design&Innovation(772)		3	50
	3.GV.04	AppliedMathematics-II		3	50
	EMC-101-25	Entrepreneurship Setup and Launch **		2	50
	Lab/Practical				
	3.VP.01	Design&Innovation-Lab		1.5	50
	3.VP.02	ITToolsLab		1.5	50
	On-Job-Training(OJT)/QualificationPacks				
	AnyoneoftheQP’scanbeoptedasofferedinSemesterI		(Anyone)	15	200
4 Semester I	Theory				
	4.GV.01	GraphicDesign(071)		3	50
	4.GV.02	GeospatialTechnology(740)		3	50
	4.GV.03	IT foundations&ProgrammingConcept		3	50
	4.GE.01	Language-II		3	50
	Lab/Practical				
	4.VP.01	GraphicDesign -Lab		1.5	50
	4.VP.02	GeospatialTechnology-Lab		1.5	50
	EMC-102-25	Entrepreneurship (Marketing Basics) **		2	50
	On-Job-Training(OJT)/QualificationPacks				
	VFXEditorMES/Q3501		(Anyone)	15	200
	**The department of Higher Education and Languages, Government of Punjab endeavor to AI-powdered entrepreneurship learning platform on the said course. The Institute /Campus shall appoint an assistant professor as faculty coordinator.				

Level	Code	EducationalComponent		Credit	Marks
	LayoutDesignerMES/Q0503				
	VoiceOverArtistMES/Q0101				
4 Semester II	Theory				
	4.GV.04	GeneralFoundationCourse-II		3	50
	4.GV.05	EngineeringGraphics		3	50
	4.GV.06	Multimedia&WebTechnology		3	50
	4.GV.07	ComputerNetworks		3	50
	Lab/Practical				
	4.VP.03	EngineeringGraphics-Lab		1.5	50
	4.VP.04	Multimedia&WebTechnology-Lab		1.5	50
	On-Job-Training(OJT)/QualificationPacks				
	AnyoneoftheQP’scanbeoptedasofferedinSemesterI		(Anyone)	15	200
5 Semester I	Theory				
	5.GV.01	WebApplications		3	50
	5.GV.02	CommunicationSkill-I		3	50
	5.GV.03	GraphicDesign(BasicSketchingandHumanAnatomyin Drawing)		3	50
	5.GV.04	IllustrationAndPhoto-Editing		3	50
	Lab/Practical				
	5.VP.01	WebApplications-Lab		1.5	50
	5.VP.02	IllustrationAndPhoto-Editing-Lab		1.5	50
	On-Job-Training(OJT)/QualificationPacks				
	CharacterDesignerMES/Q0502		(Anyone)	15	200
	StoryboardArtistMES/Q0507				
	EditorMES/Q1401				
5 Semester II	Theory				
	5.GV.05	Pre-Production		3	50
	5.GV.06	AudioEditing		3	50
	5.GV.07	VideoEditing		3	50
	5.GV.08	CommunicationSkill-II		3	50

Level	Code	EducationalComponent		Credit	Marks
	Lab/Practical				
	5.VP.03	AudioEditing-Lab		1.5	50
	5.VP.04	VideoEditing-Lab		1.5	50
	On-Job-Training(OJT)/QualificationPacks				
	AnyoneoftheQP’scanbeoptedasofferedinSemesterI		(Anyone)	15	200
6 Semester I	Theory				
	6.GV.01	PrinciplesofAnimationandTechniquesofAnimation		3	50
	6.GV.02	Basicof3-DModelling		3	50
	6.GV.03	TextureandLighting		3	50
	6.GV.04	CommunicationSkill-III		3	50
	Lab/Practical				
	6.VP.01	DigitalAnimationwithFlash-Lab		1.5	50
	6.VP.02	Maya-Lab		1.5	50
	On-Job-Training(OJT)/QualificationPacks				
	ModellerMES/Q2501		(Anyone)	15	200
	AnimatorMES/Q0701				
	RenderingArtist MES/Q3503				
6 Semester II	Theory				
	6.GV.05	3DAnimation		3	50
	6.GV.06	Introductionto3DMotionGraphics&VFX		3	50
	6.GV.07	IntroductiontoRendering		3	50
	6.GV.08	CommunicationSkill-IV		3	50
	Lab/Practical				
	6.VP.03	3DAnimationLab		1.5	50
	6.VP.04	Rendering-Lab		1.5	50
	On-Job-Training(OJT)/QualificationPacks				
	AnyoneoftheQP’scanbeoptedasofferedinSemesterI		Anyone)	15	200
7 Semester I	Theory				
	7.GV.01	DigitalCompositing		3	50
	7.GV.02	3DTexturing		3	50

Level	Code	EducationalComponent		Credit	Marks
	7.GV.03	BasicofAccounts-I		3	50
	7.GV.04	ComputerGraphics		3	50
	Lab/Practical				
	7.VP.01	DigitalCompositing-Lab		1.5	50
	7.VP.02	3DTexturing-Lab		1.5	50
	On-Job-Training(OJT)/QualificationPacks				
	CompositorMES/Q3505		(Anyone)	15	200
	TexturingArtistMES/Q2503				
	RiggingArtistMES/Q2502				
7 Semester II	Theory				
	7.GV.05	MuscleSystem		3	50
	7.GV.06	Rigging		3	50
	7.GV.07	AdvancedModellingwithZ-Brush		3	50
	7.GV.08	Basicsof Accounts-II		3	50
	Lab/Practical				
	7.VP.03	MayaMuscle-Lab		1.5	50
	7.VP.04	RiggingwithMayaLab		1.5	50
	On-Job-Training(OJT)/QualificationPacks				
	AnyoneoftheQP’scanbeoptedasofferedinSemesterI		(Anyone)	15	200

DetailedCurriculum

Level3(SemesterI)

(3.GE.01)Language-I

Module1:Readingcomprehension(prescribedtexts)andfunctionalgrammar

A variety of genres – short stories, expository pieces, biographies, poems, plays, newspaper and magazine excerpts have been included. Teaching of grammar has been integrated with the reading texts. The emphasis is on functional grammar.

The following ten prose texts and five poems have been selected for development of different reading skills.

Prosetexts(Prescribed)

1. A warmer or a colder earth (popular science) Arthur-C. Clark
2. The tiger in the tunnel (narrative) – Ruskin Bond.
3. First two or four pages from Sunny Days (autobiographical) – By Sunil Gavaskar
4. Case of suspension (narrative)
5. Big brother (narrative) Shekhar Joshi
6. Father, dear father (newspaper article from the Hindu)
7. Face to face (autobiographical) Ved Mehta
8. I must know the truth (narrative) Sigrun Srivastva
9. If I were you (play) Douglas James
10. India, her past and her future (speech) Jawahar Lal Nehru

Poems

1. Leisure – W. H. Davis
2. The road not taken – Robert Frost
3. Where the mind is without fear – Tagore
4. My grandmother's house – Kamla Das
5. The night of the scorpion – Nissi, Ezekiel

Nonprescribed

In this section learners will be exposed to newspaper, articles, tables, diagrams, advertisements etc. which they have to read carefully and interpret. In the examinations similar pieces will be used.

Grammar and usage:

The following points of grammar and usage have been selected from the reading passages.

1. agreement/concord: number – gender etc.
2. Tenses: simple past (negatives/interrogatives) present perfect, past perfect continuous, past perfect, expressing future time (will and going to)
3. Passive voice (perfect tenses and modals)
4. Modals (must, should, ought to, would)
5. Linking words (to like because although, instead of, if, as, since, who, which, that, when, however, in spite of)
6. Reported speech, statements, questions (yes/no)

Module2:Functionalwritingandstudyskills

This module help the learner towrite descriptive and narrative paragraph, letters, reports notices etc. and also practice skills of note making

1. Paragraphwriting
 - Describing objects
 - Describing people
 - Narratingevents,stories
2. Letterwriting
 - Applicationfor leave
 - Applicationfor jobs
 - Asking for information form various agencies (e.g.Lastdateforgettingprospects;price of items before placing doers etc.)
3. Notemaking
4. Ending(punctuation,spelling,appropriatevocabulary,structures)

(3.GE.02)AppliedChemistry

1. StructureofAtom:

Rutherford model of the structure of atom, Bohr's theory of electrons, quantum numbers andtheir significance, de-Broglie equation and uncertainty principle, electronic configuration of 1 to 30 elements.

2. PeriodicPropertiesof Elements:

Periodic law, periodic table, periodicity in properties like atomic radii and volume, ionic radii, ionization energyand electron affinity.Division of elements into s, p, d and f blocks.

3. ChemicalBonds:

Electrovalent, covalent and coordinate bond and their properties. Metallic bonding (electron cloud mode) and properties (like texture, conductance, luster, ductilityand malleability).

4. FuelandtheirClassification:

Definition, characteristics, classification into solid, liquid and gaseousfuel.Petroleumandbrief idea of refining into various factions and their characteristics and uses. Calorific value of fuel, Gaseous fuels- preparation, properties, composition anduse ofproducer gas, water andoil gas.

5. Water:

Impurities in water, methods of their removal, hardness of water, its types, causes and removal, disadvantagesofhard water inboilers, pHvalueand its determination by calorimetricmethod.

6. Corrosion:

Itsmeaning,theoryofcorrosion,prevention ofcorrosion byvarious methods using metallicand non-metallic coatings.

7. PlasticandPolymers:

Plastic-thermo-plasticand thermo-setting.Introductionof Polythene.P.V.C.Nylon,synthetic rubber and phenol-formal-dehyde resin, their application in industry.

(3.GE.03)AppliedPhysics

1. **Units & Dimensions:** M.K.S. fundamentals & derived units, S.I. base units supplementary units and derived units, Dimensions of various physical quantities, uses of dimensional analysis.
2. **Surface Tension and Viscosity:** molecular forces, molecular theory of surface tension, surface energy, capillary action, concept of viscosity, coefficient of viscosity, principle and construction of viscometers.
3. **Vibrations:** Vibration as simple spring mass system, elementary and qualitative concept of free and forced vibrations, resonance. Effects of vibrations on building bridges and machines members.
4. **Heat:** Temperature and its measurement, thermoelectric, platinum resistance thermometers and pyrometers. Conduction through compound media and laws of radiations.
5. **Ultrasonics:** Productions of ultrasonic waves by magnetostriction and piezo-electric effect, application of ultrasonics in industry.
6. **Optics:** Nature of light, reflection and refraction of a wave from a plane surface. Overhead projector and Epidiascope.

(3.GE.04)AppliedMathematics-I**Sets, Relations and Functions**

1. Sets
2. Relations and Functions-I
3. Trigonometric Functions-I
4. Trigonometric Functions-II
5. Relation between Sides and Angles of a Triangle

Sequences and Series

1. Sequences and Series
2. Some Special Sequences

Algebra-I

1. Complex Numbers
2. Quadratic Equations and Linear Inequalities
3. Principle of Mathematical Induction
4. Permutations and Combinations
5. Binomial Theorem

Co-ordinate Geometry

1. Cartesian System of Rectangular Co-ordinates
2. Straight Lines
3. Circles
4. Conic Sections

Statistics and Probability

1. Measures of Dispersion
2. Random Experiments and Events
3. Probability

(3.GP.01)AppliedChemistry -Lab

1. Proximate analysis of solid fuel.
2. Experiments based on Bomb Calorimeter.
3. Determination of turbidity in a given sample.
4. To determine the flash and fire point of a given lubricating oil.
5. To determine the viscosity of a given lubricating oil by Redwood viscometer.
6. To determine cloud and pour point of a given oil.

(3.GP.02) Applied Physics-Lab

1. To determine the surface tension of a liquid by rise in a capillary.
2. To determine the viscosity of a given liquid.
3. To determine the frequency of tuning fork using a sonometer.
4. To determine the frequency of AC main using a sonometer.
5. Time period of a cantilever.

Level3(SemesterII)**(3.GV.01)General FoundationCourse-I****A. BusinessManagementand Entrepreneurship****(a) EntrepreneurshipOrientation**

Importanceandrelevancereinreallife:Emphasisonself-employment.

(b) EntrepreneurshipValues andAttitudes

Innovativeness,Independence, RiskTaking,Analyticalability.

(c) EntrepreneurialMotivation

AchievementPlanning,personalefficacy,entrepreneurialgoalsetting.

(d) LaunchingofaBusinessVenture

Identificationofproject,steps in setting up a business, informationabout various institutions providing assistance, project formulation.

B. ComputationalSkills

(a) Percentage,ratio&proportion,profit&loss,discount,simpleandcompoundinterest, population growthanddepreciationofvalueof articlesusinglogarithm.

(b) Areaandvolume:rectangle,parallelogram, circle,cube,cone,cylinder&sphere.

C. EnvironmentalEducation

(a) Environmentandthesociety.

(b) Environmentproperties risks indifferenteconomicenterprises,in use ofraw materials, in processing / manufacturing and designing.

(c) Povertyand environment.

D.RuralDevelopment

(a) Agriculture,thebackboneofIndianEconomy.

(b) RuraldevelopmentprojectsinIndiaincludingIntegratedrural development programme.

(c) Agrobasedruralindustries.

(d) Communityapproach toruraldevelopment.

(3.GV.02)ITTools**I. ComputerOrganization&OS:Userperspective.**

- UnderstandingofHardware.
- BasicsofOperatingSystem.

II. NetworkingandInternet.

- NetworkSafetyconcerns.
- NetworkSecuritytoolsandservices.
- CyberSecurity.
- SafepracticesonSocialnetworking.

III. Officeautomationtools:

- Spreadsheet.

- Wordprocessing.
- Presentation.
- IV. MultiMediaDesign:(OpenSourceDesignTools)
 - InterfaceandDrawingToolsinGIMP.
 - ApplyingFilters.
 - Creatingandhandlingmultiplelayers.
 - UsingStampingandSmudgingtools.
 - Importingpictures.
- V. Troubleshooting:Hardware,SoftwareandNetworking.
 - Commonlyencounteredproblems.
 - (Monitor: No display, KB/Mouse not responding, monitor giving beeps, printer not responding, check for virus, Delete temporary files if system is slow, adjust mouse speed).
- VI. WorkIntegrated LearningIT–ISM
 - IdentificationofWorkAreas.
 - WorkExperience.

(3.GV.03)Design&Innovation

Unit–1:Introductionto Design

Session–1:ConceptofDesign

- DesignDefinition.
- DesignversusArt.
- DesignandEnvironment.
- Thebasisof DesignProcess.
- UseDesignintoday’sscenario.

Session–2:DesignFundamental

- PrinciplesofDesign.
- ElementsofDesign.
- ColourTheory.
- UnderstandingofColorwheel.
- Toincreaseandbuildsensitivity totheformsaroundthem.
- Toidentifytherevolvingstilllifeandoutdoorinvicinityofenvironment.
- Torelatethe elementsofdesigntounderstanddesign processfortheirprojects.
- Understandingthecolourquality,intensity, relationship withothercolours, textures, shape.

Unit–2:DesignTools and Techniques Sessions–

1:ProduceDrawing

- DefiningDrawing.
- Differenttechniquesofdrawing.
- Explorationofmedium.
- CompositionsandPerspectives.
- TonalTechniques.
- UseofDreamsandMusicforcreativeDrawing.
- Toidentifytheuseoftoneandvalue,Texture/Frottage.

- Identify to use contour lined drawing (continuous or cross contour).

Unit-3:Occupational

Health and Safety

Session-1:Work

Safe Review

Module

- Safety and Health responsibility.
- Role of a safe Inspector.
- Hazard identification, Risk assessment and Risk control.
- PPE.
- Dealing with emergency.
- Design a promotional poster advertising what students need to know about Safety and Dangers, or be warned about while working at College.

(3.GV.04)Applied Mathematics-II

Algebra-II

1. Matrices
2. Determinants
3. Inverse of a Matrix and its Applications

Relations and Functions

1. Relations and Functions-II
2. Inverse Trigonometric Functions

Calculus

1. Limits and Continuity
2. Differentiation
3. Differentiation of Trigonometric functions
4. Differentiation of Exponential and Logarithmic functions
5. Application of Derivatives
6. Integration
7. Definite Integrals
8. Differential Equations

Vectors and Three Dimensional Geometry

1. Introduction to Three Dimensional Geometry
2. Vectors
3. Plane
4. Straight Line

Linear Programming and Mathematical Reasoning

1. Linear Programming
2. Mathematical Reasoning

Couse Code: EMC-101-25

CourseName: **Entrepreneurship Setup and Launch**

Introduction:

This semester lays the foundation for the learner to understand what entrepreneurship is, beyond just starting a business. It introduces key ideas like problem-solving, value creation, and self-awareness. The learner will begin exploring basic business concepts while discovering their own interests and strengths.

Learners Objective:

1. Understand the core concepts of entrepreneurship through relatable, real-life examples.
2. Begin to see themselves as problem-solvers and creators.
3. Learn about business paths and choose one to try based on interest or local fit.
4. Launch a micro-hustle (online or offline) to earn their first income.
5. Build confidence and self-belief by doing.

Outcome: By the end of this semester, learners will start a simple business activity, earn their first income, and build belief in their ability to do business.

Guiding Principles/Approach:

This syllabus is built on principles of **experiential learning, growth mindset development, and identity-first learning**. Drawing from learning science and behavior design, the course shifts students from passive learning to *active doing*, where they try out small business activities in real contexts. The design helps students not just learn entrepreneurship but begin to see themselves as entrepreneurs. Emphasis is placed on *small wins, peer collaboration, and locally relevant opportunities* to ensure learning feels achievable and connected to their realities. The curriculum focuses on conceptual understanding without heavy theory, combining *practical action, reflection, and collaboration*. By making progress visible and success feel possible, it plants the seeds of self-reliance, initiative, and long-term motivation.

Semester Syllabus:

Format: 12 weeks, 4 hours/week | 2 credits

Revenue Target: ₹10,000

Week	Learning Goal	Measurable Outcome
1	Understand what entrepreneurship is and who can be an entrepreneur	Students define entrepreneurship in their own words and list 2 entrepreneurs from their local area or community
2	Connect personal identity to entrepreneurship (strengths, interests, struggles)	Students create a "value map" showing how a skill/interest/problem from their life could become a business opportunity

3	Learn about 5 business paths: contentcreation,drop-shipping, cloudkitchen/foodbusiness,gig economyand localservices	Students explore 1–2 examples from each domainandshareonethey’re mostcurious to try and why
4	Chooseapathandgenerateabasic business idea	Studentswritedownaclearoffer(what,for whom, why) and one way to reach their customer
5	Takefirst realaction:message, post,pitch,orsell	Studentsreachouttoorservice1realpotential customerandrecordwhat happened
6	Reflectonfirstattempt andshare with peers	Studentssharetheirresult,achallenge faced, andoneideatoimprovenext time
7	Improveandtryagain:aimforfirst ₹100	Studentsapplyachange,tryagain,and aim tomaketheirfirst₹100orgetmeaningful response
8	Learn how to identify and understandyourtargetcustomer	Students talk to 2 potential customers or observethemandlist3insightsabouttheir needs
9	Learnhowtoserveyourtarget audience better	Students improve one part of their offer (product, delivery, messaging, or interaction)basedoncustomerfeedbackor need
10	Explorecoreentrepreneurial values(resilience,honesty, effort)	Studentsreflecton1valuethey’re building andshowitinabusinessaskorpeerstory
11	Focusonearningandstaying consistent	Studentscompleteasecondearningtaskand tracktheirconsistency(e.g.,sameproductor messagefor3 days)
12	Reflectonearnings,grit,andhow to keep going	Studentsrecordtotalearnings,oneresilience moment, and one support system or habit they’llcontinuewith

WeeklyComponent:

Component	Duration	Description
Learning Module	~1.5hrs	- Introduceskeyconceptsinasimpleandengagingway - Includes,examples,and1–2interactivediscussionsor quizzes
ActionLab	~2hrs	- Hands-ontaskontheweeklyconcept - Includesstep-by-stepguidance,templates,and worksheets - Endswithasubmission(e.g.,video,reflection,orproofof action)
Resources	Self-paced	-Supplementaryvideos,shortreadings,real-lifestories,and tools to deepen understanding at their own pace

EvaluationCriteria

Evaluation Component	Description	Weightage
WeeklyTask Completion	Timelysubmissionofweeklytasksincluding reflections,activities,quizzesetc.	40%
Target Completion	Performance-basedevaluationonhitting revenueor profit targets(e.g.,generating₹10,000revenue)	30%
FinalProject	Acomprehensiveprojectbasedonthe semester's theme	30%

Week1:WhatisEntrepreneurship?WhoCanBeanentrepreneur?

INTRODUCTION:CouldYouBeanentrepreneur?

When people hear “entrepreneur,” they often think it means having a company, investors, or an MBA. Some even believe it's only for toppers or those with high grades. But entrepreneurship is more about mindset than qualifications: it's about seeing a problem and doing something about it. Like someone who starts selling snacks because their school canteen is always shut, or a friend who fixes broken chargers for others. If you've ever spotted a need and thought, “I can solve this,” - you've already taken your first step.

Component1:LearningModule(~1.5hours)Unit1:

Whatis Entrepreneurship?

1. *Solving problems or creating value in exchange for money.*
2. Entrepreneurship is not just about starting a company: it's about initiative, resourcefulness, and value creation.
3. Different types of entrepreneurs: small shop owners, street vendors, YouTubers, local tailors, mechanics, and more.
4. Entrepreneurs build opportunities instead of waiting for them.

SimpleSlide/VisualAidTip:

A circle that says "Problem", an arrow pointing to "Solution", then an arrow to "Earn". That's entrepreneurship.

<A video that visually shows how entrepreneurship starts with spotting a problem (e.g., long food lines), creating a solution (e.g., pre-order lunch service), and earning from it: illustrating the simple flow: Problem → Solution → Earn>

MCQ1

Q:What best describes entrepreneurship?

- A. Getting a job in a company
- B. Solving problems for others and earning from it 
- C. Studying business in college
- D. Buying expensive things

Feedback:

1. *Correct! Entrepreneurs solve problems or offer value and get paid for it.*
2. *Not quite! Entrepreneurship is about creating something useful, not just getting a job or studying.*

Unit2:WhoCanBeanentrepreneur?

Entrepreneurshipstartswithspottingaproblem,findingasolution,andcreatingvalue.Today, anyone with a phone and an internet connection can start a business: money helps, but mind set and initiative matter more at the start.

You just need:

1. A problem to solve
2. A simple skill or product
3. The courage to start small

Examples Carousel (Swipeable cards)

1. **Pooja (India)** – Sell hand made rakhi on Instagram, learned designing on YouTube.
Problem she saw: Expensive or generic rakhi in the market; no personal touch.
2. **Luis (Mexico)** – Repairs used phones in his garage, now has loyal customers.
Problem he saw: Many people couldn't afford new phones or didn't trust local repair shops.
3. **Sana (Kolkata)** – Started to find delivery from her home kitchen, now earns ₹500/day.
Problem she saw: Office workers struggled to find affordable, homemade meals.
4. **Sal Khan (USA)** – Started Khan Academy with YouTube lessons to help his cousin.
Problem he saw: His cousin needed help with math, but good learning resources were hard to access.

MCQ

Q: Which of these can be a form of entrepreneurship?

- A. Making reels on skin care tips and selling homemade face packs
- B. Buying new clothes from malls
- C. Studying engineering
- D. Playing games without sharing or streaming

Feedback:

1. Correct! Sharing useful tips + selling a product = solving a need!
2. Try again! Entrepreneurship is about creating value and helping others.

Reflection Prompt

1. If you had to earn ₹100 this week, what would you do?

Component 2: Action**Lab (~2 hours) Task****Find & Learn from 2 Entrepreneurs Near You****Steps (Checklist):**

1. Look around your neighborhood or online: find 2 people who earn through their own work
2. Ask or observe:

- a) Whatdotheydo?
- b) Howdothey earn?

- c) Whatmakesthementrepreneurial?
3. Use the **EntrepreneurTrackerTemplate** (available in the resource tab)

Final Deliverable

Learners submit:

1. A short definition of entrepreneurship (in their words)
2. 2 entries from the EntrepreneurTracker (name, what they do, what learner learned)

→ Submitted in the submission tab.

Supplementary Resources (Optional)

1. [Danny O'Neill - Getting started | Entrepreneurship | Khan Academy](#)
2. [The Better India - Stories of local entrepreneurs](#)

Week2:Can I Be an entrepreneur?

INTRO–WhatMakesanentrepreneur?

You don't need a suit, a degree, or a lot of money to be an entrepreneur.

You need one thing: a mindset. Entrepreneurs notice problems around them: and do something about it. From the boy fixing bikes outside his house to the girl teaching dance on Instagram, they all started small. What matters most is not what you have: it's how you think and act.

Component1:Learnin

gModule(~1.5hours)

Unit 1: What Makes

an entrepreneur?

KeyConcepts:

1. **Entrepreneurs are driven by curiosity:** they ask questions, explore possibilities, and seek better ways to do things.
2. **They take initiative:** they act, experiment, and create using limited resources with creativity and courage
3. **They learn by doing:** embracing mistakes as stepping stones to progress.
4. **They take full ownership:** one day they're the marketer, the delivery person, and the customer support, all in one.
5. **They are resilient:** they persist through challenges, adapt to change, and keep moving forward with purpose.

Real-Life Examples:

1. Nithin & Nikhil Kamath (Zerodha) – Started India's largest stock brokerage without formal degrees or external funding, just deep curiosity about stock markets and a desire to simplify investing.
2. *Qualities: Took initiative early and stayed persistent through challenges.*
3. Prajakta Koli (Mostly Sane) – Started by making comedy sketches about everyday Indian life: family, school, relationships: and became one of India's top digital creators.
4. *Qualities: Stayed consistent, adapted over time, and built strong audience trust.*
5. Tilak Mehta (PaperN Parcels) – As a teenager, launched a courier startup using Mumbai's dabbawala network for delivery.
6. *Qualities: Thought creatively and acted with confidence at a young age.*

Unit2:StartSmall:BuildIdeasfromWhatYouKnow

In the last unit, you learned that entrepreneurs don't just have ideas; they act, solve problems, and use what they have.

But the big question now is:

“What can I offer?”

That's where the Value Map comes in. It helps you take your first step toward thinking and acting like an entrepreneur: in your own way.

What is a Value Map?

A Value Map connects three simple things:

A. What people around you need

→ *Look around: is there something people often struggle with or something that could be better?*

B. What you enjoy or are willing to try

→ *You don't need to be an expert. Start with small things you like doing: talking to people, fixing, organizing, helping, designing, or learning something new.*

→ *Even if you're just curious about something: that's enough to begin.*

C. What solution you can create

→ *Use what you enjoy or are learning to try solving a real need around you: even in a small way*

Visuals:

3 overlapping circles:

1. “People Need”
2. “I Can”
3. “My Offer”

Examples:

1. People Need → Affordable meals

I Can → Cook + have access to home kitchen My Offer → ₹40 tiffin service

2. People Need → Study tips in Punjabi I Can → Speak clearly + love teaching

My Offer → 3-minute video tipson Instagram

MCQ

Q: What's the first step to being an entrepreneur?

- A. Waiting for the perfect idea
- B. Solving a problem with your skills ■
- C. Buying a shop
- D. Studying for years

Feedback:

1. *Correct!Entrepreneursstartbysolvingsmallproblemsusing whattheyalreadyhave.*
2. *Tryagain!It'snotaboutwaiting:it'sabout starting.*

ReflectionPrompt

1. Ifsomeonegaveyou ₹500 andaskedyouto earnfromit, whatwould you do?

Component2:ActionLab(~2 hours)**Task:CreateYourPersonalValueMapSteps(checklistin app):**

1. Thinkof2–3problemspeoplefacearoundyou(hunger,phonerepair,boredom,etc.)
2. Listyourownskills,interests,orresources.
3. Matcheachproblemwithsomethingyoucouldoffer.
4. Use the **ValueMapTemplate** in the resources to organize your ideas.

FinalDeliverable(SubmittedinApp):

1. Yourcompleted**ValueMap**(in3columns:Need,Skill,Offer)
2. Highlight**1idea**you'dliketoexplorefor yourfuturehustle

SupplementaryResources(Optional)

1. "StartwithWhy"bySimonSinek
2. [10CharacteristicsofSuccessful Entrepreneurs|Business:Explained](#)

(3.VP.01)Design&InnovationLab**PracticalWorkshop****Session–1:KnowledgeWorkshop**

- Sourceandapplydesignindustryknowledge.

- Source and apply information on the history and theory of design.
- Project 1: Research on a Contemporary designer.
- Project 2: Photograph and Report on Signage and Window display.
- Project 3: Critique the Design of a Product.

Session-2: Design Concepts Workshop

- Design concepts workshop road signs.
- Design concepts workshop zoological and botanical logo.
- Design concepts workshop T-shirts design.

Session-3: Graphic Design Workshop

- Produce Designs for Clothing Range, Shoes or CD Cover.
- Color zones applied Colour assessment.
- Poster Design for an Opera or Ballet.

(3.VP.02) IT Tools Lab

- Spreadsheets, Word, Presentation
- Multimedia Design
- Troubleshooting
- Project/Practical File
- Viva Voce

Level4(SemesterI)**(4.GV.01)GraphicDesign****UNIT-I DesignProcessesand Practices**

1. RoleofDesigninSociety
 - a) FunctionsofDesign
 - b) ImplicationsandImpactof Graphic Design
 - c) RoleofGraphicDesigner
 - d) ContemporaryGraphicDesigninIndia
2. GraphicDesignProcesses
 - a) MethodologyofGraphicDesign

UNIT-II PrinciplesandElementsofDesign

3. SketchingandDrawing
 - a) IntroductiontoDrawing:anaidinvisualrepresentation
 - b) Typesofdrawing
 - Drawingfrommemoryandimagination
 - Drawingfromobservation
 - DrawingfromDimensionalinformation
 - c) Virtuesofdrawing
4. Colour
 - a) Colourstheories
 - b) Colourwheel
 - c) ColourHarmonies orColourSchemes
 - d) ColourSymbolism
5. FundamentalsVisualComposition
 - a) Introduction
 - b) PrinciplesandElementsofComposition
6. Typography
 - a) Classification
 - b) Anatomyof Font
 - c) FeaturesofaFont
 - d) TextFormatting
 - e) MultilingualTypography
7. PrinciplesofLayoutDesign
 - a) Themeandcontent
 - b) TypesofLayout
 - c) ColoursinLayout
 - d) CopyandType
 - e) DesignforPublication

UNIT-III MediaandDesign

8. DigitalImagingandPrinting
 - a) TypesofDigitalImages
 - b) DigitalimageEditing

- c) DigitalPrinting
- 9. AdvertisingDesign
 - a) WhatisMediaPlanning
- 10. Campaign Design
 - a) Kinds of Campaign
 - b) PlanningaCampaign
 - c) Research&DataCollection
 - d) CreativeAspects
 - e) DevelopingaConcept
 - f) DepartmentsofanAdvertisingAgency
- 11. IntegratedMethodsofAdvertising
 - a) Kinds of Events
 - b) PublicRelations
 - c) Media
 - d) Visual Communicationandits Impact
- 12. Graphic DesignforInteractiveMedia
 - a) BasicConcepts
 - b) TypesofWebsites
 - c) TheWebsiteDevelopmentandManagementProcess
 - d) GraphicDesignApproach
 - e) DesigningNavigation

(4.GV.02)GeospatialTechnology

Chapter–1:RemoteSensing(RS)

- Introduction.
- SpectralReflectanceSignature.
- DigitalImageProcessing.
- VisualInterpretationofSatellitedata.
- AerialPhotoandItsInterpretation.
- AdvancedRemoteSensing Technologies.
- AdvantagesandBenefitsofRS.

Chapter–2:Geographic InformationSystem(GIS)

- Introduction.
- GISDataElementandDataStructure.
- FundamentalsofDatabaseConcept.
- DataInputtoGISSystem.
- GISDataEditing.
- Attribute DataLinking.
- Spatial andNonSpatialdataAnalysis.
- MapProjectionandCoordinateSystem.
- DigitalCartography.
- AdvantagesandBenefitsofGIS.

Chapter-3:GlobalPositioningSystem(GPS)

- Introduction.
- GPSAccuracyand Accuracyfactors.
- TypesofGPS.
- ListofGlobalNavigationSystem.
- GPSToday&LimitationsofGPS.
- UsesofGPSTechnology.

Chapter-4:TrendsinGeospatialTechnology

- Introduction.
- RemoteSensingTrends&Technology.
- GISTrends&Technology.
 - i. WebBasedGIS.
 - ii. EnterpriseGIS.
 - iii. MobileGIS.
 - iv. 3-DVisualizationandFly through.
 - v. OpenGIS.
- GPSTrends&Technology.

Chapter-5:ApplicationsofGeospatialTechnology

- WatershedStudies.
- FloodStudies.
- GroundwaterStudies.
- HealthIssues.
- UtilityStudies.
- SecurityandDefenseStudies.
- UrbanandinfrastructureStudies.

(4.GV.03)ITFoundations&ProgrammingConcept

- Introduction:Introductiontocomputersystem,uses,types.
- DataRepresentation: Numbersystemsandcharacterrepresentation,binaryarithmetic
- Human Computer Interface: Types of software, Operating system as user interface, utility programs Devices: Input and output devices (with connections and practical demo), keyboard, mouse, joystick, scanner, OCR, OMR, bar code reader, web camera, monitor, printer, plotter
- Memory: Primary, secondary, auxiliary memory, RAM, ROM, cache memory, hard disks, opticaldisks
- Computer Organisation and Architecture: C.P.U., registers, system bus, main memory unit, cache memory, Inside a computer, SMPS, Motherboard, Ports and Interfaces, expansion cards, ribbon cables, memory chips, processors.
- Overview of Emerging Technologies: Bluetooth, cloud computing, big data, data mining, mobile computing and embedded systems.

- Use of Computers in Education and Research: Data analysis, Heterogeneous storage, e- Library, Google Scholar, Domain specific packages such as SPSS, Mathematics etc.
- Basic programming elements and concepts in C++

(4.GE.01) Language- II

Module-3: Listening and speaking skills

In this module the learners will be exposed to a variety of listening activities recorded on audiotapes. These will be samples of good spoken English, which the learners can use as models. Work sheets will accompany the listening material.

This module will include the following:

1. Introducing yourself/friends in formal and informal situations.
2. Inviting people (over the phone and face to face) giving details of occasion, time place and date. Acceptance and refusal of invitation – formal and informal.
3. Seeking and supplying information (example opening an account in a bank, applying for loans etc.)
4. Talking and conveying messages (over the phone and face to face).
5. Giving directions/instruction.
6. Discussing contemporary issues related to environment, child labour, gender bias etc.
7. Listening to excerpts from television and radio.
8. Listening to poems/plays (prescribed).
9. Listening to speeches/ talks.
10. Listening to songs like "We shall overcome".

Module-4 to 6

(English for specific purposes) (opt anyone)

There are modules being offered. A learner has to opt for any one. The first is for academic purposes and the next two are for vocational purposes. The focus is not on the teaching of the subject matter like science and literature but on the way in which language is used in the different subjects.

Module 4: English for Science

This course will introduce learners to some interesting pieces of popular science

1. Health and hygiene
2. Conservation of (nearly extinct) animals.
3. Plant life.
4. Biogas/solar energy.

These pieces illustrate the use of English in scientific writing: giving information factually, logically and objectively.

Module 4: English for Receptionist

This module will introduce the learner to a variety of exercises, tasks and meaningful activities related to the receptionist's use of English. The printed course materials will be supported by tapes. The following competencies will be developed:

1. Receiving messages, making request etc.
2. Supplying information

3. Giving advice and making suggestions
4. Dealing with complaints
5. Making entries in an appointment book, register etc.

Module 4: English for Office Use

This course will help the learner to use English effectively and appropriately in the office environment. The competencies will be developed.

1. Using the telephone taking and passing messages.
2. Receiving messages
3. Making notes on files and circular.
4. Writing office notes, memos, notices, agendas for meetings.
5. Telegrams and fax messages.
6. Writing business letters, application enquires, complaints.
7. Filling in forms, cheques, pay slips etc.

(4.VP.01) Graphic Design Lab

1. (i) Functions of Design
(ii) Graphic Design Process
2. (i) Types of Drawing
(ii) Colour and its Theories
(iii) Elements of Composition
(iv) Types of Layout and a Complete Design for Publication.
3. (i) Types of Digital Images, Editing and Printing
(ii) Advertisement Design Planning
(iii) Means of Campaign Designing
(iv) Types of Visual Communication and Design a Poster / Hoarding / Book-cover, etc.
(v) Layout of a Website Home - Page on a Chosen Field.
(Institution / organization / sports / art / event etc.)

(4.VP.02) Geospatial Technology Lab

- Data Input to GIS System.
- GIS Data Editing.
- Attribute Data Linking.
- Spatial and Non Spatial data Analysis.
- Map Projection and Coordinate System.
- Digital Cartography.
- Advantages and Benefits of GIS.

EMC-102-25	Entrepreneurship (Marketing Basics)	0L:0T:4P	2 Credits
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Introduction

This semester helps learners understand marketing as a practical life skill - not just "advertising." It teaches them how to communicate value, attract the right customers, and grow something small into something sustainable. Learners explore the basics of customer psychology, messaging, content creation, and simple sales strategies. Through hands-on activities, they will practice real marketing techniques for their micro-hustle or a simulated business idea, learning how to get attention, build trust, and generate sales.

Learner's Objectives

1. Understand the core concepts of marketing using simple, relatable real-world examples.
2. Learn how customers think, choose, and buy - and how businesses influence decisions ethically.
3. Identify and define a target customer clearly instead of "selling to everyone."
4. Create clear messaging: what they sell, who it helps, and why it matters.
5. Use basic marketing channels (offline + online) to attract customers.
6. Run a simple marketing campaign and measure what worked.
7. Build confidence in selling, promoting, and talking about their product/service.

Outcome: By the end of this semester, learners will be able to market a product/service using basic strategies, attract real customers, and improve their results through feedback and experimentation.

Guiding Principles / Approach

This syllabus is built on action-based learning, clarity-first communication, and customer-first thinking. Learners don't just study marketing—they practice it in real situations through small experiments and repeated improvement. The course is designed to feel approachable and practical: learners create simple content, test messaging, talk to real people, and observe what influences decisions.

Instead of heavy theory, students build marketing skills through doing: customer discovery, storytelling, channel experiments, and reflection. The curriculum emphasizes confidence-building, ethical marketing, and communication as a leadership skill. By helping learners see results quickly (even small wins like one customer or one inquiry), the program builds motivation, creativity, and real-world business readiness.

Semester 2 Curriculum & Milestones

Format: 12 weeks, 4 hours/week | 2 credits

Recap Milestone: Recap and Introduction

Description: Revise what you learned in Semester 1 and plan what you will do in Semester 2

Milestone #	Milestone name	Milestone Description	Task #	Task Title	Activities
Recap	Recap and Introduction	Revise what you learned in semester 1 and plan what you will do in		Revise first 12 milestones of Semester 1	• Watch a video on 'Semester 1 summary' • Download 12 summary cards of Semester 1 milestones • Write 3 key learnings of Semester 1 • Write 3 things you will improve in semester 2 • Attempt Semester 1 Recap Quiz

Milestone #	Milestone name	Milestone Description	Task #	Task Title	Activities
		semester 2	2	Set your goals for Semester 2	• Learn how to 4X your revenue in Semester 02 using Marketing • Read how famous brands use marketing to increase revenue • Set your marketing goals • Attempt Semester 2 Readiness Quiz

Milestone 13: Marketing Fundamentals

Description: Marketing Fundamentals milestone focuses on helping students understand the basics of marketing and how they can use marketing to scale their businesses and generate revenue.

Milestone #	Milestone name	Milestone Description	Task #	Task Title	Activities
13	Learn Marketing Fundamentals to scale your business	Learn how you can use multiple types of marketing to scale your business and grow revenue	1	Understand what is marketing	• Watch a video on marketing fundamentals
					• Read examples of famous marketing campaigns in India
					• Explain what you learned about marketing
					• Attempt task 01 quiz
			2	Learn different types of digital marketing	• Watch a video on what is digital marketing
					• Read a document on types of digital marketing
					• Write what kind of digital marketing works best for your business and why
					• Attempt task 02 quiz
			3	Write 3 marketing ideas for your business	• Read a document on how businesses like yours are using marketing to generate revenue
					• Write 3 marketing ideas to scale your business
					• Validate your ideas with 3-5 people
					• Shortlist the best idea and explain how it will generate revenue
					• Share your experience of doing this milestone
					• Attempt task 03 quiz

Milestone 14: WhatsApp Community Marketing

Description: WhatsApp Community Marketing milestone focuses on helping students learn how to build a WhatsApp community for their users and use it to generate trust, engagement, and sales.

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Milestone #	Milestone name	Milestone Description	Task #	Task Title	Activities
14	Build and activate	Build a WhatsApp	1	Create your WhatsApp community	• Watch a video on why you should build a WhatsApp Community

	your WhatsApp community	community for your users and use it to generate trust, engagement, and sales			• Read a document on how to create a WhatsApp community
					• Enter the name of your community
					• Upload your WhatsApp community link
					• Attempt task 01 quiz
			2	Invite people to join your WhatsApp community	• Read a few sample invite and welcome messages
					• Draft an invite message to invite 50 people to join your community
					• Draft a welcome message for your community members
					• Upload a screenshot of your welcome message
					• Attempt task 02 quiz
			3	Engage your community users and start building trust	• Learn 'how to engage people in your community'
					• Read top 10 community engagement ideas for your business
					• Write 5 types of content to post weekly in your community
					• Create and upload your weekly calendar
					• Attempt task 03 quiz
			4	Get 3 sales from your WhatsApp Community	• Learn how to do soft-selling on community
					• Create a community-only offer
					• Learn how to convert interested people into paid customers
					• Write a simple plan to generate 3 sales per month from the community
					• Share your experience of doing this milestone
					• Attempt task 04 quiz

Milestone 15: Generating Content for Marketing using AI

Description: AI-led Content creation and marketing milestone focuses on helping students learn how to use AI tools to generate creative ideas and create professional videos, posters, and blogs.

Milestone #	Milestone name	Milestone Description	Task #	Task Title	Activities
15	Use AI to generate content for marketing	Learn how to use AI tools to generate creative ideas and create professional videos,	1	Learn what is content marketing	• Watch a video on 'what is content marketing' which content works for brand awareness or revenue generation
					• Write 3 types of content you believe your customers like
					• Attempt task 01 quiz
			2	Generate content ideas to attract	• Learn how to use AI to generate content marketing ideas for your

		posters, and blogs		customers	business
					• Generate 10 small content ideas to attract your customers
					• Discuss the ideas with your users and take feedback
					• Shortlist top 3 content ideas to attract customers
					• Attempt task 02 quiz
			3	Create your first brand video using AI	• Watch a video on 'How to use AI tools to create simple short videos'
					• Read this guide on how to ask AI to write a video script
					• Generate 5 ideas for your AI videos and write them here
					• Upload your AI generated video link
					• Attempt task 03 quiz
			4	Create a brand poster using AI	• Learn how to create a poster using AI
					• Write a prompt for the poster will you create using AI
					• Upload the AI poster you have created
					• Post this poster in your WhatsApp community
					• Attempt task 04 quiz
			5	Write a blog using AI	• Learn how to use prompt engineering to write content for your business
					• Read list of topics on which you can write a blog
					• Write the topic on which you will write a short blog
					• Write the first version of your blog
					• Share your blog with your friends and faculty
					• Share your experience of doing this milestone
					• Attempt task 05 quiz

Milestone 16: Social Media Marketing

Description: Social Media Marketing milestone focuses on helping students learn what social media marketing is and how to create a social media weekly plan that engages users and improves brand visibility.

Milestone #	Milestone name	Milestone Description	Task #	Task Title	Activities
16	Plan your social media marketing strategy	Learn what is social media marketing and how can you execute it to scale your business	1	Learn what is social media marketing	• Watch a video on 'Introduction to Social media marketing'
					• Learn different types of social media marketing
					• Read a document on how to use social media marketing to generate revenue
					• Write your understanding of social media marketing
					• Write one social media marketing idea for your business
					• Attempt Task 01 Quiz
			2	Research your competitors	• Learn how to research your competitors
					• Find your competitors
					• Write top 3 things your competitors are

					posting
					• Find one unique gap that you can capture
					• Attempt task 02 quiz
			3	Finalize your content pillars	• Watch a video on 'what are content pillars'
					• Read examples of 'content pillars'
					• Write 5 content pillars for your social media strategy
					• Attempt task 03 quiz
			4	Create your weekly social media plan	• Watch a video on 'how to create a weekly social media plan'
					• Look at examples of 'social media calendar'
					• Create and upload your weekly calendar
					• Upload the link of your Instagram Channel
					• Share your experience of doing this milestone
					• Attempt task 04 quiz

Milestone 17: Trust-led Marketing

Description: Trust-led Marketing milestone focuses on helping students build trust through social media proofs, testimonials, or basic engagement and later converting them into leads and sales.

Milestone #	Milestone name	Milestone Description	Task #	Task Title	Activities
17	Generate leads and turn them into sales	Use testimonials, conversations, and daily posts to generate leads and close sales.	1	Use social proof to build trust	• Identify 2 happy customers
					• Create a testimonial post with CTA
					• Post testimonial on social media
					• Post testimonial on the community
					• Attempt task 01 quiz
			2	Make people share their problems	• Learn how to ask open-ended questions
					• List 5 customer problems
					• Post these problems in community and social media
					• Evaluate top 2 problems customers face
					• Encourage people to share their problems
					• Attempt task 02 quiz
			3	Help your users with 3-5 days content sprint and generate leads	• Brainstorm or use AI to create a solution document for each problem
					• Post solution to 1 problem on a daily basis
					• DM people to check if your solution is helping them
					• Write how many leads did you generate
					• Attempt task 03 quiz
			4	Convert leads into sales	• Learn how to convert leads into sales
					• Soft sell your offering in community and social media
					• DM people how can your product help them better
					• Follow up after 24 to 48 hours
					• Write how many leads you converted into sales
					• Share your experience of doing this

					milestone
					• Attempt task 04 quiz

Milestone 18: Viral/Trend Marketing

Description: Viral Marketing milestone focuses on helping students learn how to launch viral campaigns for their businesses using the latest trends and make their brand go viral without spending any money.

Milestone #	Milestone name	Milestone Description	Task #	Task Title	Activities
18	Make your brand go viral	Design viral marketing campaigns to reach 5X users without spending any money	1	Learn viral marketing	• Understand what is virality and how it works
					• Read about top 10 viral marketing campaigns in India
					• Write 3 reasons why people share content
					• Attempt task 01 quiz
			2	Design 2 viral campaigns for your business	• Learn 5 types of common viral marketing strategies
					• Read 10 viral marketing ideas for your business
					• Design 2 viral campaigns for your business
					• Take feedback from people and finalize one campaign
					• Set your campaign targets
					• Attempt task 02 quiz
			3	Launch one viral campaign to increase customer reach	• Create your campaign launch video or poster
					• Create your campaign launch message
					• Launch your campaign on your social media platform
					• Launch your campaign in your WhatsApp community
					• Attempt task 03 quiz
			4	Promote your campaign to make it viral	• Share your campaign in other groups and forums
					• Measure your campaign performance
					• Learn how to improve your campaign
					• Analyze your campaign and record final metrics
					• Enter the summary of your campaign
					• Share your experience of doing this milestone
					• Attempt task 04 quiz

Milestone 19: BTL/Offline Marketing

Description: BTL/Offline Marketing milestone focuses on helping users learn about BTL (below the line) or offline marketing and use it to reach out to local customers and generate revenue.

Milestone #	Milestone name	Milestone Description	Task #	Task Title	Activities
19	Drive revenue through offline/BTL	Use offline activities to reach local customers	1	Understand offline or BTL marketing	• Watch a video on what is BTL marketing
					• Read about famous BTL marketing campaigns
					• Write how you can use BTL marketing for your business

	marketing	and generate sales	2	Pick your offline marketing idea	• Attempt task 01 quiz
					• Learn about common offline tactics for your business
					• Write 1 offline marketing idea you can execute
					• Design your brand poster for offline marketing
					• Create your offline marketing offer or pitch
					• Practice your pitch with friends and take feedback
					• Attempt task 02 quiz
			3	Execute offline marketing in local market	• Identify people or locations in local for offline marketing
					• Pitch to at least 10 real customers
					• Collect contact details for WhatsApp Community invite
					• Close at least one sale
					• Write your offline marketing metrics
					• Share your experience of doing this milestone
					• Attempt task 03 quiz

Milestone 20: Collaboration and Affiliate Marketing

Description: Collaboration and Affiliate Marketing milestone focuses on helping users learn about affiliate marketing and how to collaborate with individuals/businesses to reach more customers and generate revenue.

Milestone #	Milestone name	Milestone Description	Task #	Task Title	Activities
20	Grow through collaboration and affiliation marketing	Use partners and affiliates to reach new audiences and generate sales	1	Understand affiliate marketing and collaboration	• Watch a video on what is affiliate marketing
					• Read about top collaboration or affiliate marketing campaigns
					• Learn 10 common types of collaboration or affiliate marketing for your business
					• Pick 3 types that can work for your business
					• Attempt task 01 quiz
			2	Design your affiliation model	• Learn how to start an affiliation program
					• Decide your commission structure
					• Write a pitch for partnership
					• Attempt task 02 quiz
			3	Finalize one person or business for collaboration	• Learn how to find a right partner for collaboration
					• Create a list of 5 to 10 people or businesses for collaboration
					• Send your partnership pitch to potential partners
					• Write the name of one final partner
					• Attempt task 03 quiz
			4	Execute the collaboration	• Explain how will the partner market your brand
					• Post the link or screenshot of successful collaboration
					• Respond to new leads within 24 hours

					• Close at least one sale
					• Attempt task 04 quiz
			5	Measure your collaboration	• Write number of leads generated
					• Write number of sales closed and revenue generated
					• Write what worked and how to improve collaboration
					• Share your experience of doing this milestone
					• Attempt task 05 quiz

Milestone 21: Advertising Marketing (Meta)

Description: Advertising Marketing milestone focuses on helping users learn how to post a paid ad on Meta (Instagram and Facebook) promoting their business and reach to more users or generate revenue.

Milestone #	Milestone name	Milestone Description	Task #	Task Title	Activities
21	Run your first ad on Instagram	Learn how to boost posts or run simple video ads to reach new viewers	1	Setup your Meta Business Suite	• Watch a video on why to run ads on Meta
					• Learn different types of ads
					• Read the guide on Meta Ad account setup
					• Setup your Meta Ad account
					• Attempt task 01 quiz
			2	Design your first paid ad	• Watch samples of good ad designs for your business
					• Finalize your ad objective
					• Upload the final draft of your ad with final copy and creatives
					• Attempt task 02 quiz
			3	Define your target audience and budget	• Watch a video on 'how to target the right people for ad'
					• Define your target audience
					• Learn how to decide the right budget for your ad
					• Decide your final budget
					• Attempt task 03 quiz
			4	Launch your ad	• Learn how to create and launch your ad
					• Create your ad and review ad preview
					• Upload the screenshot of launched ad
					• Attempt task 04 quiz
			5	Manage incoming leads from ad	• Draft a message for incoming leads
					• Send draft message to leads within 24 hours
					• Pitch your offer to leads and follow up
					• Close at least one sale
					• Attempt task 05 quiz
			6	Measure your ad performance	• Learn metrics to measure ad performance
					• Write money spent and leads or impressions
					• Mention CPL or CPM
					• Write revenue generated and number of sales closed
					• Write what worked and how to improve ads in future
					• Share your experience of doing this milestone
					• Attempt task 06 quiz

Milestone 22: Psychological Marketing

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Description: Psychological Marketing milestone focuses on helping users identify psychological triggers like urgency, pricing, and offers, and use them to increase conversions and revenue.

Graphics&Multimedia

Milestone 24: Closure and Next Step

Description: The final milestone focuses on helping users reflect on their learnings and also create an action plan for the next few months to continue to scale and grow their business.

Milestone #	Milestone name	Milestone Description	Task #	Task Title	Activities
24	Plan your next growth phase	Document your 12 weeks of learning and create a 1 month plan to scale and grow your business	1	Review your progress	• List all the ideas you executed
					• Write which milestone helped you the most and how
					• Write which milestone helped you the least and why
					• Write your key learnings from this semester
					• Create a not-to-do list for your business
					• Attempt task 01 quiz
			2	Create your 1 month marketing plan	• Learn how to create a 1 month marketing plan
					• Set your marketing goal
					• Create and upload your 1 month plan to achieve this goal
					• Share your experience of doing this milestone
					• Attempt final semester quiz

Level4(SemesterII)**(4.GV.04)GeneralFoundationCourse-II****A. BusinessManagementand Entrepreneurship**

ManagementofBusiness, Elementarytreatment/exposure to basicconceptual frame workofthe topic listed below:

(a)BasicFunction(b)MarketingManagement(c)FinancialManagement(d)Production Management(e) Personnel Management

B. ComputationalSkills

1. (a)Solutionofflinearequationsandtheirapplicationtoproblemofcommercialmathematics.
(b)Systemofflinearequationsandinequationintwovariables.Applicationsinformationof simplelinear programming problems.
2. Statistics: Raw data, bar charts and Histogram; Frequency Tables; Frequency Polygon; Ogive;Menu, Median and Mode ofungroupedandgroupeddata;StandardDeviation;Introductionto Mortality tables; Price Index etc. Introduction to Computers.

C. EnvironmentalEducation&Rural Development

EnvironmentalEducation:

- a. Modernization of agriculture and environment, irrigation, water logging, use of fertilizers, pesticides, soil erosion, land degradation (desertification and deforestation), silting and drying of water resources.
- b. Rational utilization, conservation and regeneration of environmental resources (soil, air, water, plant, energy, minerals).

2. RuralDevelopment

Principlesandgoalsofruraldevelopment,majorproblems/constraintsinruraldevelopmentin India.

(4.GV.05)Engineering Graphics**UnitI:IsometricProjectionofSolids**

- i. Construction of isometric scale showing main divisions of 10mm and smaller divisions of1mm, also showing the leading angles. Drawing helping view/s such as triangles, pentagon, hexagon, etc., using isometric scale.
- ii. Isometric projection (drawn to isometric scale) of solids such as cube, regular prism and pyramids (triangular, square, pentagonal and hexagonal), cone, cylinder, sphere, hemi-sphere, frustum of right regular pyramids (triangular, square, pentagonal, hexagonal) and cone, when theyare cut bya plane parallel to the base. The axis and the base side ofthe solid should be either perpendicular to HP / VP or parallel to HP and VP. (Indicate the direction of viewing)

- iii. Combination of two solids (except "frustum" of Pyramids and Cone) Keeping the base side parallel or perpendicular to HP/VP and placed centrally together, axis of both the solids should not be given parallel to HP.

UnitII:MachineDrawing

A. Drawingofmachineparts

- i. Drawingtofull sizescalewithinstruments.

Introduction of threads: Standard profiles of screw threads square, knuckle, B.S.W., Metric (external and internal). Bolts (Square, Hexagonal, Tee and Hook); Nuts: (Square and Hexagonal), Plain washer, combination of nut and bolt with orwithout washer for assembling two parts together, Single riveted lap joint with standard dimensions.

- ii. Free-handsketches

Conventional representation of external and internal threads; studs (plain, square-neck and collar); screws (round-head, cheese-head, 900 flat counter sunk-head, hexagonal socket head and grub-screw). Types of rivets:- snap head, pan head-without tapered neck, flat head and 600 countersunk flat head. Types of sunk-keys (rectangular taper, woodruff and double-head feather key with gib head on both ends).

B. AssemblydrawingsandDis-Assemblydrawings

(4.GV.06)Multimedia&WebTechnology

Unit1:IntroductiontoDatabaseManagement

- Introductiontodatabaseconceptsanditsneed
- DatabaseTerminology:Data,Record/Tuple,Table,Database,field/attribute
- ConceptofKeys:Candidatekey,Primarykey,Alternatekey,andForeignkey
- Examples of common Database Management System: MySQL, Ingres, Postgres, Oracle, DB2, MS-SQL Server, Sybase etc.
- DatabaseTool:
Introduction to MySQL: Using MySQL creating Database and table, defining primary key, inserting records, displaying records using SELECT command, WHERE clause, modifying records using UPDATE, deleting records

Unit2:NetworkingAndOpenStandards

- ComputerNetworking:EvolutionofNetworking:ARPANET,WWW,Internet
- NetworkTopologies:Bus,Star,Tree
- TypesofNetwork:LAN,WAN, MAN
- WiredTechnologies:Twistedpaircable,coaxialcable,opticalfiber
- WirelessTechnologies:Bluetooth,infrared,radiolink,microwavelink,radiolinkandsatellite link
- Networkdevices:MODEM,Hub,switch,repeater,gateway-andtheirfunctions

- Identifying computers and users over a network: Basic concept of domain name, MAC (Media Access Control) and IP Address, domain name resolution
- Wireless/Mobile Communication: GSM, CDMA, GPRS, WLL, 3G, 4G
- Internet Applications: SMS, Voicemail, e-Mail, Chat and Videoconferencing
- Network Security Concepts: Cyberlaw, firewall, cookies, hackers and crackers
- Open Source Concepts: Proprietary and open source software (OSS), common FOSS/FLOSS examples (e.g. GNU/Linux, Firefox, OpenOffice, Linux, Mozilla web browser, Apache server, MySQL, Postgres, Pango, Tomcat, PHP, Python)
- Indian Language Computing: character encoding, UNICODE, different types of fonts (open type vs true type, static vs dynamic), Entering Indian Language Text – phonetic and key map based

Unit 3: Web Page Development

- Review of HTML/DHTML, JavaScript covered in Class XI
- Installation and Managing WEB-Server: IIS/XAMPP/LAMP;
- PHP: Concept of PHP, features of PHP, other equivalent tools – JSP, PHP
- Including PHP in web page
- Data types: integer, double, string, boolean, null, array, object
- Variables: Using variables in PHP
- Constants: Using constants in PHP, constant() function
- Output data to Screen: echo and print statements
- Operators:
 - a) Arithmetic operators: +, - (Unary and Binary), *, /, %, **
 - b) Assignment operators: =, +=, -=, *=, /=, %=
 - c) String operator: ., =
 - d) Comparison operators: <, >, <=, >=, !=, ==, ===, !==
 - e) Incrementing/Decrementing operators: ++, --
 - f) Logical operators: !, &&, ||
 - g) Array Operators: union(+), equality==, inequality<>, !=
- Operator precedence
- Built-In Functions:
 - String Manipulation Functions: strtoupper(), strtolower(), strlen(), ltrim(), substr(), rtrim(), trim(), strrev(), strcasecmp(), strcmp(), stripslashes(), strchr(), strpos(), strippos()
 - Time & Date Functions: Date(), getdate(), gettimeofday(), Mktime(), strtotime(), cal_days_in_month()
 - Arrays: Declaration and use of indexed arrays (1 dimensional), inbuilt functions sort(), rsort()
 - Conditional statements: if, ifelse, if...elseif..... else, switch
 - Loops: while, do while, for, foreach
 - Unconditional exit from loop/switch using break
 - User Defined Functions: Defining a function, calling/invoking a function,
 - Passing parameters/arguments, Pass by value, pass by reference, return value, default value
 - Global Variables – Superglobals
\$GLOBALS, \$_SERVER, \$_REQUEST, \$_POST, \$_GET, \$_FILES, \$_ENV, \$_COOKIE, \$_SESSION

- Elements of \$_SERVER: PHP_SELF, SERVER_NAME, HTTP_HOST, HTTP_USER_AGENT
- PHP Forms
- Form Handling, Form Validation, Form URL/E-mail
- Text Files:
Opening a file, Reading a file, Writing a file, Closing a file
- Other Features
PHP File Upload, Cookies, Sessions (start, modify and destroy), Error Handling
- Working on Database: (Using MySQLi Procedural API) Connecting with Databases, opening and closing databases, Inserting, retrieving, modifying/updating, deleting of records from tables

Unit 4: Multimedia and Authoring Tools

- Movie File Formats: AVI, MPEG, SWF, MOV, DAT
- Embedding: Audio/Video on the web page
- Multimedia Authoring Using Macromedia Flash: Making of simple movie, setting properties, frame rate, dimensions, and background color
- Movie Frames: Concept of frame, frame buffer, and frame rate, creating a key frame, Inserting text into the frame, inserting graphical elements into the frame, converting text/graphics to symbol, inserting symbol into the frame, setting symbol property (graphics/button/movie), inserting blank key frame, selecting all/specific frames of a layer, copying/pasting selected frames
- Scene: Concept of scene, duplicate scene, add scene, delete scene, and navigating between scenes
- Layers: Concept of layer, layer properties, layer name, show/hide/lock layers, viewing layer as outline, adding/deleting a layer
- Types of Layer - normal/guide/mask
- Special Effects: Motion Tweening, Shape Tweening, Inserting Sound Layer
- Testing a Scene and Movie
- Multimedia Application: Education (use of CAL tool), entertainment, edutainment, virtual reality, digital libraries, information kiosks, video on demand, video phone, video conferencing and telemedicine.

(4.GV.07) Computer Networks

UNIT-I

Introduction to computer Network - Communication: An Essential Part of Our Lives, Communicating in a Network-Centric World, Network as a Platform, Architecture of the Internet, Trends in Networking

Communicating over the Network- Platform for Communications, LANs, WANs, and Internet networks, Protocols, Using Layered Models, Network Addressing

UNIT-II

Application Layer Functionality and Protocols - Applications: The Interface Between the Networks, Making Provisions for Applications and Services, Application Layer Protocols and Services

Examples

OSITransportLayer-RolesoftheTransportLayer,IPv4Addresses,TCP:Communicatingwith Reliability, UDP: Communicating with Low Overhead

UNIT-III

OSINetworkLayer-IPv4,Networks:DividingHosts into Groups, Routing, How Data Packets Are Handled, Routing Processes

Addressing the Network- IPv4 Addresses for Different Purposes, Assigning Addresses, Calculating Addresses,Testing the Network Layer

OSIDataLinkLayer-DataLinkLayer,MACTechniques,MACAddressingandFramingData

(4.VP.03)EngineeringGraphicsLab

- (i) To perform the following tasks from the given views of the prescribed Machine

Block(One).

Value-Points

1. Copy the given views
2. Drawing the missing view without hidden lines
3. Sketching the Isometric view without hidden edges
4. To make the machine block of the above in three dimensions.

- (ii) Computer Aided Design (CAD) –Project

Project file to be submitted on the simple solids (Prism, Pyramids and Frustums of equilateral triangle, square, pentagon and hexagon) or machine blocks as prescribed in part-I by using the CAD software.

(4.VP.04)Multimedia&WebTechnologyLab

Practicals based on the theory covered in class

Level5(SemesterI)

(5.GV.01)Web Applications

MovieEditingTools.

- Familiarizationofinterfacecomponents.
- Importingpictures.
- ImportingAudioand VideoFiles.
- SplittingandJoiningMovieClips.
- AddingTitlesandpublishing.

Customizingand EmbeddingMultimedia componentsinWebPages.

- CompatibleMultimediafileformatsforWebPages.
- EmbeddingAudiofile.
- EmbeddingVideofile.
- EmbeddingFlashfile.

Web Scripting – Java Script.

- JavaScriptreview.
- Functions–userdefined.
- StringObject.
- MathObject.
- ArrayObject.
- Events.
- CaseStudies.

WorkIntegratedLearningIT–WA-II.

- AdvancedFeaturesofWebDesign.
- Codeview,Add-ins/SnippetsandPageTransitions.
- DynamicWebtemplates.
- SEO-SearchEngineOptimization.
- Forms-Advanced.
- Publishingwebpagesorwebsites-I.

(5.GV.02)CommunicationSkill-I

Communication Process: The magic of effective communication; Building self-esteem and overcoming fears; Concept, nature and significance of communication process; Meaning, types and models of communication; Verbal and non-verbal communication; Linguistic and non-linguistic barriers to communication and reasons behind communication gap/ miscommunication.

Structural and Functional Grammar: Sentence structure, modifiers, connecting words and verbals; phrases and clauses; Case: subjective case, possessive case; objective case; Correct usage of nouns, pronouns and antecedents, adjectives, adverbs and articles;

(5.GV.03)GraphicDesign(BasicSketchingandHumanAnatomyinDrawing)

UnitI:

Orientation into visual art form. The Basics of traditional 2D animation, Introductiontotheskill required thereof, beginning life drawing, Use of simple shapes. How to draw sketches with the helpofbasicshapesLearningtodrawlines,circles,ovals,scribbles,zigzag(random)patterns

etc. Background elements, trees, mountains, clouds, water bodies, meadows, perspective drawing Lights and shadows day night scenes, layers (concept and implementation) layout design and staging. An intro on howto make drawings for animation, shapes and forms, about 2D and 3D drawings, Caricaturing-fundamentals, Exaggeration, Attitude, Silhouettes, Boundary breaking exercises and warm-ups.

UnitII:

HUMAN ANATOMY: Structure of man, proportion of body parts, drawing from basic form, Line of action, balance Rhythm, turnings, twisting, drawing plane surfaces, torso, face, eyes, nose, ears, mouth, hand and feet.

FEMALE ANATOMY: Proportion and construction of female body, twisting of female body, chest, torso, face, parts of face, hands, hands in action, feet and gestures, curves, curls, rhythm and twist.

CHILDANATOMY: Understanding child's figure, proportion and construction of child body, face, chubbiness, hand, feet and gestures.

ANIMAL ANATOMY: Animals from basic forms, understanding motion and grace of animals, turning animals to character, face, legs, tails, perspectives.

CARTOON ANATOMY: Understanding cartoon characters, drawing from basic shapes, line of action, distortion of proportion, cartoon faces, eyes, mouths, hairs, nose, hands, feet, gestures and poses.

(5.GV.04)IllustrationsandPhotoEditing

UNIT- I

Introduction to Adobe Illustrator: Introduction to Adobe Illustrator, work area and workspaces and tools. Opening files, importing artwork, viewing artwork, rulers and grids, Drawing in Illustrator, drawing lines and shapes, pencil tool, pen tool, editing drawing, tracing, symbols, colouring, applying colours, swatches, adjusting colour and colour settings.

UNIT-II

Painting with Illustrator, fills, strokes, brushes, transparency, blending, gradient, meshes and color blending. Selecting, transformation, scaling, grouping, reshaping, cutting, blending of object, creating 3D object, text and typing, special effects, filters, shadows, glow, feathering graphic styles.

UNIT-III

Photoshop and its interface, Navigation and All tools, Working with basic selections, advanced selections-1 (on the basis of channels, color range, extract, filter etc), Exercises on selections, Quick Masks, Layer Mask, Vector Mask, Layers & Layer Blending Modes, Play with Photoshop, Filter Gallery, Exercises, Bring some object and try to make it in computer, Make your own cartoon character.

Color Theory, Make a perfect cropping of some images using Photoshop, Prepare a cut-out of some images using Photoshop, Place nice background for those images, Prepare nice background using gradient tool, Scan various images, Color adjustment of those images (PHOTO RETOUCHING).

UNIT-IV

Make Nature scene (winter) digital painting, Make Nature scene (summer) digital painting. Make digital painting (Use brush, pencil, smudge etc), Make something like modern art keeping in mind color combination, make a collage of Indian art and culture. Make a collage of wildlife animals, Make a portrait of celebrity (Digital painting). Convert a B&W image into color (Use variation), "Choose a theme (Music, Festivals, Sports, Dance) and Design 5-8 graphics on them.", Color Modes, Color Corrections, Advanced color correction techniques (levels, Curves, Hue, Saturation etc), Design that Ad from your own style. Design motif, storyboard, Make an animal character, "Plan a story of that character & Make its backgrounds in three/four frames", Make posters on nature/earth, Matte Painting- Composition, Creating images for the web: Exporting images from Photoshop.

(5.VP.01) Web Applications Lab

- Movie Editing Tools
- Customizing and Embedding Multimedia Components in Web Pages.
- Web Scripting- JavaScript.

(5.VP.02) Illustration and Photo-Editing-Lab

- Script breakdown
- Storyboards
- Costume acquisition
- Sets and Properties design and sourcing
- Location recce and hire
- Location permissions and legal requirements, permissions from civic authorities
- Equipment requirements and bookings
- Travel and Transport
- Catering for crew
- Hospitality for out of town shoots

Level 5 (Semester II)

(5.GV.05) Pre-Production

- Research, brainstorming & story concept creation: Intention / purpose & audience (what you intend to say & why)
- Story structure & character development: Narrative structure and character backstory
- Sequence & shot analysis: Analysis and re-creation of timing and shot composition from professionally produced film/video productions
- Storyboards: Visual design (layout/composition, style, color, lighting etc.); Language of cinema (narrative structure, shot composition, spatial/directional continuity)
- Animatics/pre-viz: Timing and transitions Audio layering (music, ambient sound, narration)
- Budgeting and planning: Consideration of schedules, costs and other planning issues

(5.GV.06) Audio Editing

UNIT-I

Sonic Sound Forge: Manipulating audio: Auto trim/crop, mute, DC offset, resample, reverse, smooth/enhance, Fade in/out, insert silence, bit depth converter etc, understanding various digital audio formats like .WAV, .AIFF, .MP3, .swf, .WMA etc, understand audio plug-in, importing and exporting into multiple audio file formats like MP3, real audio, QuickTime formats, etc.

Event tool: move, split, slip and trim multiple events, create fades, apply ASR (Attack/Sustain/Release). Understanding script editor window, Spectrum analysis tools, scrub tool etc, statistics tool (Max, RMS, DC offset, zero crossings), sampler tool etc, Audio editing: workflow, real time editing, event based editing, waveform volume and pan envelopes, Edit, record, encode and master digital audio, editing audio by drag and drop options, crossfading audio tracks, balancing sound levels, creating smooth fades etc.

UNIT-II

Understanding Multichannel audio recording, synchronize audio and video. Understanding regions and play lists, editing of fields, name markers, loops, and regions, Timing basis: absolute frames, measures and beats, Time and frames. Audio effects like: Equalizer, Volume, chorus, distortion, Delay/echo, pitch, bend/shift, reverb, vibrato, normalize etc Insert track markers, adding multiple tracks, adjusting track time, musical instrument file processing

(5.GV.07) Video Editing

- Adobe Premiere: Concept of non-linear editing,
- The basics of editing: Overview, Importing and Exporting: various audio, video and graphics in various formats, Edit, manipulate and arrange these elements in visual timeline, understand all tools of toolbox for editing clips. Titling and superimposing.
- Panels: Tools panel, Project,
- Monitors: Source and program, Timeline, Audio meters,
- Misc. Tasks and functions: Titles, Transitions, speed and duration, Effects, Key frames, Types of edit, Opacity, trimming,

- Adding Specialeffects like:Startrektransportereffect,Blurpartof an image, Ghost effect, Highlight part of an image etc.

(5.GV.08) CommunicationSkill-II

CommunicationProcess:

Basic Communication Skills: Listening, Speaking, Reading and Writing Skills; Precise writing/ abstracting/ summarizing; Style of technical communication Curriculum vitae/resume writing; Innovativemethods to enhance vocabulary,analogy questions.

StructuralandFunctionalGrammar:

Agreement of verb with the subject: tense, mood, voice;Writingeffectivesentences;Basic sentence faults;

(5.VP.03)AudioEditingLab

Using Editing Software – editing basics and implementation of various techniques used in non-linearediting.Mastering final edit line – audio levels, colour correction, audio mixing, mixed and unmixed versions, importing and applying compatible graphics files. Understanding compression and its affectsalong with various methods.

(5.VP.04)VideoEditingLab

- AssistingProductiondepartmentonshoot
- AssistingDirectiondepartmentonshoot
- AssistingArtdepartmentonshoot
- AssistingCameradepartmentonshoot
- AssistingSounddepartmentonshoot

Level6(SemesterI)

(6.GV.01)PrinciplesofAnimationandTechniquesofAnimation

UNIT- 1

Drawings with the help of basic shapes, Animal study, Human anatomy, Shading techniques, Live model study, Introduction- Importance of confidence, Difference between “lookingatthedrawing” and “seeing the drawing”, What is observation, Procedure- How to approach, Importance of Guideline- Line of action, Overcomethe fear, Drawing for animation,

UNIT- 2

An Introduction on how to make drawings for animation, Shapes and forms, About 2d and 3d drawings, Caricaturing – fundamentals, Exaggeration, Attitude, Silhouettes, Boundary- breaking exercises and warm ups, gesture drawing, Line drawing and quick sketches, Drawing from observation, memory and imagination.

UNIT- 3

Drawing for Animation, Exercises and warm ups on pegging sheet, Quick Studies from real life, Sequential movement drawing, caricaturing the Action. Thumbnails, Drama and psychological effect, Motion Studies, Drawing for motion,

UNIT- 4

The Bodylanguage, Re-defining the drawings, Introduction to animation production process, Basic Principles in animation, Squash and stretch, Anticipation, Staging, Straight ahead and pose to pose, Follow through and overlapping action, Slow in and slow out, Arcs, Secondary action, Timing, Exaggeration, Solid drawing, Appeal, Mass and weight, Character acting, Volume, Line of action, Path of action, Walk cycles- animal and human.

(6.GV.02)Basicof3-DModelling

UNIT- I

Interface of 3DS max, Understanding the concept of four view ports, Aligning object in the each view port in X, Y, Z axis, Hot keys, User defined hot keys, Using the menus, Floatinganddocking. Command panel, customizing the interface, Using draganddropfeature, Introductiontodifferent workspaces, "Geometry, Sub objects, Extruding, Welding, bridging etc, Recognizing the workspaces".

UNIT-II

Introduction to standard and extended primitives. "Introduction to creating complex objects with Standard and extended primitives", Understanding the spline tools. Introductiontopolytools. Using modifier stack, navigating the modifier stack, File navigation, Introduction to Connection (Hierarchy, Group, and Link).

UNIT-III

Introduction to the 3d elevators and walk through, "Introduction to modifiers and modifier gizmos, Familiarity with Modifiers like Bend, edit poly, Xform, wave, lathe symmetry etc

UNIT-IV

Advanced 3DS Max, Modelling objects with lathe, loft, extrude etc, Creating 3D objects from 2D spline shapes, Organic and inorganic modelling

(6.GV.03) Texture and Lighting

Unit I:

Introduction to texturing, working with Diffuse, Opacity and Reflection, Basics of UV unwrapping, Creating texture maps, Bump and Displacement Mapping, Introduction to Video post, Introduction to standard lights.

(6.GV.04) Communication Skills III

UNIT-I Recognizing and Understanding Communication Styles: What is Communication, Passive Communication, Aggressive Communication, Passive-Aggressive Communication, Assertive Communication, Verbal and Non Verbal Communication, Barriers and Gateways to Communication.

UNIT-II Listening Skills: Types of Listening (theory /definition), Tips for Effective Listening Academic Listening- (lecturing), Listening to Talks and Presentations, Basics of Telephone Communication Writing Skills: Standard Business letter, Report writing, Email drafting and Etiquettes, Preparing Agenda and writing minutes for meetings, Making notes on Business conversations, Effective use of SMS, Case writing and Documentation

UNIT-III Soft Skills: Empathy (Understanding of someone else point of view), Intrapersonal skills, Interpersonal skills, Negotiation skills, Cultural Aspects of Communication.

UNIT-IV Group Communication: The Basics of Group Dynamics, Group Interaction and Communication, how to Be Effective in Groups, Handling Miscommunication, Handling Disagreements and Conflicts, Constructive Criticism

(6.VP.01) Digital Animation with Flash Lab

- Data management in postproduction.
- Setting up and preparing editing rooms and sound editing rooms
- Logging of rushes
- Assisting in rough cuts
- Assisting in editing line-up
- Assisting in synchronizing visuals and dialogue
- Assisting in recording and matching sound effects

(6.VP.02) Maya Lab

- Navigate the Maya interface
- Access your objects in the Maya scene graph
- Use the Maya polygon and NURBS modeling tools
- Shade and apply texture maps to objects inside of Maya

- Union: Region belonging to one or both polygons
- Intersection: Region belonging to both polygons
- Difference: Region belonging to first but not second
- Polygon Texturing

Level 6 (Semester II)

(6.GV.05) 3D Animation

Unit I: Body Mechanics

Students learn to use principles of traditional animation within the context of 3D animation by effectively applying them onto the character.

Part of good acting for animation is planning. The students learn to create or collect authentic visual references (both still and video) for animating body mechanics and understanding acting.

Good poses are not only essential to create believable physicality but also it helps to clearly convey the character emotion for storytelling. They learn the importance of balance and weight, checking the silhouette all the time to make clearer poses.

They learn to act out body mechanics, learn the effect of physics (gravity/friction etc.) and artistic presentation (composition, staging, silhouette etc.)

Students learn to convey Emotion not only in the facial expression but also in the body language.

Unit II: Facial Expression and Lip Sync

Foundation of good facial expression depends upon the reference and pre-planning. Detailed expression chart and voice recording is used as a starting point for any facial animation. Students learn to internalize the dialogue and they rehearse the sounds to match the shapes. They also need to draw out key poses before starting to pose in 3D.

A good animator needs more skill set than just to be able to animate how to create lip-synch.

Students explore how to create the subtle facial expression to suit the personality of the character and the accent style of the pre-recorded dialogue.

Unit III: Animation and the Body

Exploration of the diverse ways in which the human form takes shape in animated films, from highly photorealistic representations to stream-of-consciousness movement. Specific examples from 2D, 3D, stop-motion and hybrid work will be examined in order to shed light on the construction and animation of the body in contemporary film.

(6.GV.06) Introduction to 3D Motion Graphics & VFX

UNIT- I

Concepts for Broadcast animation for logos, channel IDs and montages, Multi-layer compositing, Special effects, Super imposition and titling, Exporting various file formats outputs as per the end user requirements.

UNIT-II

Introduction to batch render & work group, Adding cameras & lights to a simple scene to make a complex compositing, Adding 2D back ground and elements into a 3D character layers, Creating object, material IDs for further adding special effects, Effects for digital video 2D layers and 3D layers for more effective outputs, adding particle effects into a scene.

UNIT-III

Introduction to colour character and keying, "Editing the real time video with CG based scene and merging both of them to create a final output, Exporting various file format, output as per the end user requirements.

UNIT-IV

Introduction to the batch rendering and work groups, Introduction to the concepts of editing in terms of compositing, Adding special effects in built in compositing software to make a simple shot into a perfect output.

UNIT- V

Chroma keying, Luma key, Blue screen, Key frame text & layer animation & 3D particles, Effects etc. Color correction, Introduction to 3D compositing concepts i.e. Layers and masking, Rot scoping, Rig removal, Morphing.

(6.GV.07) Introduction to Rendering

Unit I:

This unit teaches students about rendering concepts; formats and resolutions.

Unit II:

This unit teaches students the advantages of different render softwares such as mental ray, v-ray, render man etc.

Unit III:

This unit teaches students the benefits of layer based rendering. This process enhances the image quality without need of re-rendering the images again.

Unit IV:

The rendered layers or passes need to be composited to get the final output.

(6.GV.08) Communication Skills IV

Forms of non-verbal communication; interpreting body-language cues; Kinesics; Effective use of body language. The presentation and oral communication skill will be imparted through Group Discussion, Differences between group discussion and debate; Presentation Skills, Oral presentation and public speaking skills; The course also includes training and skill of Technology-

based Communication, power-point presentation. Activities/tasks like role playing, group discussion, public speaking, extempore presentation and interviews will be conducted on regular basis.

Writing Skills: The activities will include: Writing Task: identifying the focus, generating ideas, outlining, etc. Paragraph Structure and Linking Sub-points in a Paragraph Cohesion and unity in a paragraph, Minding Punctuation and Proofreading, Summarising, Reviewing and Aspects of Creative Writing. Activities / tasks to be conducted like paragraph writing, essay writing, writing a review of a literary text, writing a summary of a literary text, comprehension and analysis of a literary text, preparing an advertisement.

(6.VP.03)3DAnimationLab

- Assist in laying background music tracks
- Assist in mixing and mastering video
- Assist in creating titles and subtitles and basic animation sequences
- Understand and assist in the execution of modelling and rendering in 3D animation software.

(6.VP.04)3DRenderingLab

Introduction to Scene, Preparing the Scene, Basic Settings for Texturing, Create & Assign Textures, Light Setup, V-Ray Rendering Settings

- Rendering with V-Ray
- V-ray light setup
- V-ray rendering settings
- HDRI Illumination
- Fine-tuning shadows
- Final render setting

Level7(SemesterI)

(7.GV.01)Digital Compositing

- IntroductiontoCompositing software
- Principlesofcompositing
- Basictechniques
- Transparency
- Rotoscoping
- WireRemoval
- Chromakey
- Layerbasedcompositing
- Compositingmodes
- Animatinglayers

(7.GV.02) 3DTexturing

UNIT- I

Introduction to basic material types & Procedurals. Study of concepts: Opacity, Smoothness, Specularity, and color, Working with Maya Surface Nodes-Blinn, Phong & Lambert, Working with Transparency, Reflection & Refraction, Bump & Displacement Maps, Introduction to unwrapping, Unwrapping the maps forvarious 3D characters.

UNIT-II

Working with 2D and 3D Texture, Introduction to the mapping and advanced texturing techniques, Shadow maps; ray traced shadows and radiosity, Creating photo real environments and textures, Basics of Utilities-Reverse, Stencil, Condition, Sampler Information.

(7.GV.03)BasicofAccounts-I

Chapter1:

- Definetheaccountingprocess
- Describetherolesofaccountants
- Explainaccountingconceptsandprinciples
- Discusstheconceptoftheaccountingequation
- Usethe accountingequationtoanalyzebasic transactions in terms ofincreases and decreases
- Reportingfinancialinformationonabalancesheet

Chapter2:

- Determinehowtransactions changeowner'sequityinanaccountingequation
- Reportingachangedaccountingequationonabalancesheet

Chapter3:

- Analyzetransactions usingT-accountsandusingdebits andcredits
- Usedebitsandcreditstorecordincreaseanddecreasesinaccounts

Chapter4:

- Record journal entries in a 5-column journal
- Define accounting terms related to journalizing transactions
- Prove and rule a five-column journal and prove cash

Chapter5:

- Prepare a chart of accounts and opening accounts
- Post separate amounts from a journal to a general ledger
- Post column totals from a journal to a general ledger
- Make correcting entries

Chapter6:

- Reconcile a bank statement and record bank service charges, dishonored checks, and petty cash transactions

(7.GV.04) Computer Graphics

UNIT-I Graphics Primitives: Introduction to computer graphics, Basics of Graphics systems, Application areas of Computer Graphics, overview of graphics systems, video-display devices, and raster-scan systems, random scan systems, graphics monitors and workstations and input devices. Output Primitives: Points and lines, line drawing algorithms, mid-point circle and ellipse algorithms. Filled area primitives: Scan line polygon fill algorithm, boundary fill and flood fill algorithms.

UNIT-II 2-D Geometrical Transforms: Translation, scaling, rotation, reflection and shear transformations, matrix representations and homogeneous coordinates, composite transforms, transformations between coordinate systems. 2-D Viewing: The viewing pipeline, viewing coordinate reference frame, window to viewport coordinate transformation, viewing functions, Cohen-Sutherland and Cyrus-beck line clipping algorithms, Sutherland –Hodgeman polygon clipping algorithm.

UNIT-III 3-D Object Representation: Polygon surfaces, quadric surfaces, spline representation, Hermite curve, Bezier curve and B-Spline curves, Bezier and B-Spline surfaces. Basic illumination models, polygon rendering methods.

UNIT-IV 3-D Geometric Transformations: Translation, rotation, scaling, reflection and shear transformations, composite transformations. 3-D Viewing: Viewing pipeline, viewing coordinates, view volume and general projection transforms and clipping

(7.VP.01) Digital Compositing Lab

- 2D animation preproduction
- 2D character design
- 2D environment and background layout

- Motiongraphicsequences

(7.VP.02)3DTexturingLab

1. ApplyingTextureforinorganic polygonmodels-I
(Lamps,Mobile,Planet,Landwithgrasstexture,rock,atmosphericobjectssystem)
2. ApplyingTexturefororganicpolygonmodels-I(Cartoon,Semicartoon)
3. ApplyingTextureforinorganic polygonmodels-II(Solarsystem,Car,Bike,Plane)
4. ApplyingTexturefororganicpolygonmodels-II(Human,Animal)
5. ApplyingTexturefororganicSubdivisionmodels- I(Cartoon,Semicartoon)
6. ApplyingTextureforinorganicSubdivisionmodels-II(Solarsystem,Car,Bike,Plane)
7. Applying textureforrendering finaloutputwithorganicandinorganic objects

Level7(SemesterII)

(7.GV.05)MuscleSystem

UnitI:

Introduction to bones system/Joints and IK handles, creating bones system and maintaining naming conventions,

UnitII:

Skinning: types, import and export of skin weights, IK and FK basics, IK and FK switch, stretchy IK and FK,

Unit III:

Introduction to Deformers: attics, wrap, cluster, riggle, wire etc. Use of deformers in rigging process.

(7.GV.06) Rigging

UNIT-I

Introduction to constraints and implementation to rigging, Maintaining proper hierarchy, grouping and creating controls, Rigging the characters, Introduction to Muscle system, Working with Muscle rigging, Introduction to automated rigging systems and methods.

UNIT-II

"Embedding small scripts in the hierarchy control system, to save time and facilitate handling", Advanced rigging, Vertex weighting techniques, Rigging solutions to Anatomical Problems, Using advanced rigging to archive natural articulation of character.

(7.GV.07)AdvancedModellingwithZ-Brush

UNIT- I

Z-Brush 2 features, system requirement, Z-Brush 2 concept, working with Z-Brush 2, working with the canvas, working with layouts, working with palettes, Z-Brush 2 configuration, using start-up documents, tray modes, working with Z-Script palette and working with the preference palette.

UNIT-II

Types of tools in Z-Brush 2, modes, options and related palettes, explaining the tool palette, working with tools, working with pixel based tools, working with gyro tool, Autodesk Maya and Autodesk 3D max settings, introduction to curves, the alpha adjust curve, the edit curve, the smoothing curve, the diffuse curve, the specular curve, the transcurve, the reflect curve, the noise curve and the intensity curve.

UNIT-III

Strokes, lighting, shadows, transformation, working with alphas, texture concepts, texture inventory, understanding the texture palette, texture mapping, seamless textures, painting textures and materials.

UNIT-IV

Creates mesh visibility, morph target, multi-resolution modelling, edge loop, different maps, explain projection master, working with Z Spheres, understanding adaptive skinning and understanding unified skinning.

UNIT- V

Sculpting, sculpting brushes, using stencils, sculpting using projection master, understanding and render palette and posing characters.

(7.GV.08) Basic of Accounts-II

Chapter1:

- Describe and prepare the worksheet
- Plan and adjust entries on a worksheet
- Extend financial statement information on a worksheet
- Find and correct errors on a worksheet

Chapter2:

- Describe the content and purpose of the three basic financial statements and how they are related
- Prepare financial statements directly from the worksheet with a net income and a net loss

Chapter3:

- Journalize and post adjusting entries
- Journalize and post-closing entries and prepare a post-closing trial balance

Chapter4:

- Describe the nature of merchandising business
- Describe and be able to journalize purchases of merchandise for cash
- Describe and be able to journalize purchases of merchandise on account and buying of supplies
- Describe and be able to journalize cash payments and other transactions

Chapter5:

- Journalize sales (compute sales tax) and cash receipts
- Describe the concept of subsidiary ledgers
- Journalize and post using accounts payable subsidiary ledgers
- Journalize and post using accounts receivable subsidiary ledgers

(7.VP.03) Maya Muscle Lab

Practical's based on theory to be implemented in Autodesk Maya Muscle

(7.VP.04) Rigging with Maya Lab

- 3Dmodelling
- 3Danimation
- 3DRigging
- TexturingandLighting
- Renderingandcompositing