Estd. 1962
"A++" Accredited by
NAAC (2021)
With CGPA 3.52

SHIVAJI UNIVERSITY, KOLHAPUR - 416004,
MAHARASHTRA
PHONE:EPABX-2609000, www.unishivaji.ac.in, bos@unishivaji.ac.in
शिवाजी विद्यापीठ, कोल्हापूर -४१६००४,महाराष्ट्र
दूरध्वनी-ईपीएबीएक्स -२६०९०००, अभ्यासमंडळे विभाग दुरध्वनी ०२३१—२६०९०९४
०२३१—२६०९४८७

Ref.No.SU/BOS/Science/271 **Date: 03/05/2025**

To,

The Principal,
All Concerned Affiliated Colleges/Institutions
Shivaji University, Kolhapur.

Subject: Regarding revised syllabi of B.Sc. Part-II (Sem.III & IV) degree programme under the Faculty of Science and Technology as per NEP-2020 (2.0).

Sir/Madam,

With reference to the subject mentioned above, I am directed to inform you that the university authorities have accepted and granted approval to the syllabi, nature of question paper B.Sc. Part-II (Sem. III & IV) degree programme under the Faculty of Science and Technology as per NEP-2020 (2.0).

B.Sc.Part-II (Sem. III & IV) as per NEP-2020 (2.0)			
1.	Pollution	8.	Food Science (Entire)
2.	Biochemistry	9.	Biotechnology (Entire)
3.	Food Science and Quality Control	10.	Environmental Science (Entire)
4.	Computer Science (Optional)	11.	Information Technology (Entire)
5.	Biotechnology (Optional/Vocational)	12.	Food Science and Technology (Entire)
6.	Animation (Entire)	13.	Food Technology & Management (Entire)
7.	Computer Science (Entire)	14.	All Faculty UG Part II Environmental Studies (VEC)

This syllabus, nature of question and equivalence shall be implemented from the academic year 2025-2026 onwards. A soft copy containing the syllabus is attached herewith and it is also available on university website www.unishivaji.ac.in NEP-2020@suk(Online Syllabus)

The question papers on the pre-revised syllabi of above-mentioned course will be set for the examinations to be held in October /November 2025 & March/April 2026. These chances are available for repeater students, if any.

You are, therefore, requested to bring this to the notice of all students and teachers concerned.

Thanking you,

Yours faithfully,

Dy Registrar
Dr. S. M. Kubal

Encl: As above

for Information and necessary action

Copy to:

1	Dean, Faculty of Science & Technology	6	Appointment Section A & B
2	Director, Board of Examinations and Evaluation	7	I.T.Cell /Computer Centre
3	Chairman, Respective Board of Studies	8	Eligibility Section
4	B.Sc.-M.Sc. Exam Section	9	Affiliation Section (T.1) (T.2)
5	Internal Quality Assurance Cell (IQAC Cell)	10	P.G. Seminar Section

SHIVAJIUNIVERSITY, KOLHAPUR

NAAC A++ Grade with CGPA 3.52

Multiple Entry and Multiple Exit Option (NEP-2020)

Syllabus for

B.Sc. Animation

(Under Faculty of Science and Technology)

PART-II SEMESTER - III & IV

(Syllabus to be implemented from Academic year 2025-26)

Multiple Entry and Multiple Exit Option (NEP-2020)

B.Sc.AnimationPart-II(Level-5.0) With Mathematics is minor

SEMESTER-III(Duration-Six Month)										
Sr. No.	CourseCode	**TeachingScheme**			**ExaminationScheme**					
		Theoryand Practical			University Assessment(UA)			InternalAssessment (IA)		
		Lectures (Per week)	Hours (Per week)	Credit	Maximum Marks	Minimum Marks	Examinutes	Maximum Marks	Minimum Marks	Examinutes
1	SubjectI MajorV:	2	-	2	40	14	90	10	04	20
2	SubjectI MajorVI:	2	-	2	40	14	90	10	04	20
3	Subject I Practical III: Practical Based onSubjectIMajorV &MajorVI	-	4	2	40	14	90	10	04	-
4	SubjectIIMinorV	2	-	2	40	14	90	10	04	20
5	SubjectIIMinorVI	2	-	2	40	14	90	10	04	20
6	Subject II Practical III: Practical Based onSubjectMinorVI	-	4	2	40	14	90	10	04	-
7	OE–III(T/P):	2	-	2	40	14	90	10	04	20
8	VSC–I(P)Major specific	2	-	2	40	14	90	10	04	20
9	SEC-I(T/P):	-	4	2	40	14	90	10	04	20
10	AEC-I:	2	-	2	40	14	--	10	04	20
11	CC-I:	2	-	2	40	14	90	10	04	20
	Total(A)			22	440			110		

SEMESTER-IV(Duration-SixMonth)										
Sr. No.	CourseCode	**TeachingScheme**			**ExaminationScheme**					
		Theoryand Practical			University Assessment(UA)			InternalAssessment (IA)		
		Lectures (Per week)	Hours (Per week)	Credit	Maximum Marks	Minimum Marks	Exam minutes	Maximum Marks	Minimum Marks	Exam. Hours
1	SubjectI MajorVII	2	-	2	40	14	90	10	04	20
2	SubjectI MajorVIII	2	-	2	40	14	90	10	04	20
3	SubjectIPracticalIV Practical Based on Subject I Major VII&MajorVIII	-	4	2	40	14	90	10	04	-
4	SubjectIIMinorVII	2	-	2	40	14	90	10	04	20
5	SubjectIIminorVIII	2	-	2	40	14	90	10	04	20
6	SubjectIIPracticalIV Practical Based on Subject II Minor VII	-	4	2	40	14	90	10	04	-
7	OE–III(T/P)	2	-	2	40	14	90	10	04	20
8	SEC-II(T/P)	2	-	2	40	14	90	10	04	20
9	AEC-II	-	4	2	40	14	90	10	04	20
10	VEC-II	2	-	2	40	14	--	10	04	20
11	CEP-INSS/NCC	2	-	2	40	14	90	10	04	20
	Total(A)			22	440			110		

Multiple Entry and Multiple Exit Option (NEP-2020)

B.Sc. Animation (Entire)Program Structure

B.Sc. Animation Science (Entire) Part-II (Level-5.0)

Semester	Subject Type	CourseCode	CourseTitle
SEM–III	CourseI	MajorV	Basicof2DAnimation
		MajorVI	Basicof3DAnimation
		MajorPracticalIII	Labcourse MajorV andMajorVI
	CourseIII	MinorV	LinearAlgebra
		MinorVI	NumericalMethod
		MinorPracticalIII	Labcourse MinorV andMinorVI
		OE-3(T/P)	Strategic I.T. Management
		VSC1 (P) (Majorspecific)	MotionGraphics
		SEC1 (T/P)	Riggingin3DAnimation
		AEC1	English
		CC-1	Cinematography

Semester	Subject Type	CourseCode	CourseTitle
SEM–IV	CourseI	MajorVII	Advanced3D Animation
		Major VIII	Rendering3DF Animation
		MajorPracticalIV	LabcourseMajorVIIandMajorVIII
	CourseIII	MinorVII	ComputationalGeometry
		MinorVIII	OperationalResearch
		MinorPracticalIV	Labcourse MinorVII andMinorVIII
		OE-4(T/P)	DigitalMarketing
		SECI1 (T/P)	DigitalEditing
		AEC1I	English
		VEC1I	EnvironmentalStudies
		CEP-I	

DSC:DisciplineSpecificCourse

- MAJOR:Mandatory/Elective
- MINOR:Coursemaybefromdifferentdisciplinesofsamefaculty of DSC Major
- OE(OpenElective):Electivecourses/OpenElectivetobechosen compulsorily from faculty other than that of the Major.
- VSC/SEC:VocationalSkillCourses(MAJORrelated)/Ski ll Enhancement Courses
- AEC/VEC/IKS:AbilityEnhancementCourses(English,Modern Indian Language)/Value Education Courses/ Indian Knowledge System

(Generic&Specific))

- OJT/FP/RP/CEP/CC: On-Job Training(Internship/Apprenticeship) / Field Project (Major related)/ Research Projects (Major related) Community Engagement (Major related)/ Co-Curricular courses(CC) such as Health& Wellness, Yoga Education, Sport, and Fitness, Culturalactivities,NSS/NCCandFine/applied/visual/performingArts /VivekVahinietc.

B.Sc.ComputerScience(Optional)

Multiple Entry and Multiple Exit Option
(NEP-2020)
PARTIISEMIII
Titleofcourse:IntroductiontoStatistics

CourseOutcomes:

Aftercompletionofthiscoursestudentswillbeable to;

1. AcquireknowledgeofMeaningandScopeofStatistics,variousstatistical organizations.
2. Understand the basic knowledge of data collection and various statistical elementary tools.
3. Understand thebasicconceptofMeasures ofCentralTendencyandDispersion.

UNITI **(15Hours)**

IntroductiontoStatistics:Concept,DefinitionofStatisticsandScopeofstatistics,

NatureofData:PrimaryandSecondarydata,Qualitativeandquantitativedata, Discrete and continuous data, frequency, cumulative frequency, frequency distribution..Population and Sample: Statistical population. Finite population, Infinite population, Census method, Sample, sampling method, Advantages of sampling method over census method. SRS, SRSWR and SRSWOR Representation of Data: Discrete frequency distribution, Continuous frequency distribution, Cumulative frequency distribution, Inclusive and Exclusive methods of classification, Open end classes, illustrative examples. Representationof databygraphical method:Histogram, frequency polygon, frequency curve, Ogive curve. Representation of data by diagrammatic Method: Bar diagram (Simple), Pie chart.

UNITII **(15Hours)**

Measures of central Tendency: Meaning of averages, Requirements of good average. Arithmeticmean(A.M.),Combinedmean,Median,Quartiles,Mode,Relationbetweenmean, median and mode. Merits and Demerits of Mean, Median and Mode, determination ofMedian and Mode by Graph. Numerical Examples. Measures of Dispersion: Meaning of dispersion, Absolute and Relative measures of dispersion Requirements of good dispersion. Q.D, M.D, S.D. Variance and Combined variance, Coefficient of Variation (C.V) Concept of Skewness, Numerical Examples

Reference Books:

1. Statistical Methods,by Dr.S.P.Gupta,Sultan Chandand Sons Publication.
2. Introduction to Statistics,byC.B. Gupta.
3. Mathematical Statistics,byH.C.SaxenaandJ.N.Kapur.
4. Business Statistics, by S.S.Desai.
5. BusinessStatistics,byG.V.Kumbhojkar.

B.Sc.PartII-Animation Semester –III

DSC-AN-C1:Basicsof3DAnimation

TotalContactHours:36hrs.(45lecturesof48minutes) Credits: 03

Theory: 3.2 Lect./Week Total Marks:50

CourseOutcomes:

1. Tofamiliarizethestudentswithvariousapproaches,methodsandtechniquesofAnimation Technology.
2. Todevelopcompetenciesandskillsneededforbecominganeffective Animator.
3. Masteringtraditional&digitaltoolstoproducestillsandmovingimages.
4. Exploringdifferentapproachesincomputeranimation.
5. ToenablestudentstomanageAnimationProjectsfromitsConceptualStagetothefinal Product creation
6. ToapplyAudioand VideoProductionTechniquestoanAnimation Project.

UnitI **18 hrs**

WorkinginMaya-CreatingandEditingMayNodes,CreatingMayaProjects,Organizing Complex NodeStructureswithAssets,FileReferences,ConvertNURBSSurfacestoPolygons,Boolean Operations, Sculpting Polygons Using Artisan, Advanced Polygon Editing Tools Using Subdivision Surfaces , SubD Levels.

UnitII **18 hrs**

PolygonModelingUnderstandingPolygonGeometryWorkingwithSmoothPolygonsUsing Smooth Mesh Polygons Editing Polygon Components, Adding Components, Modeling with Deformers Combining Meshes Polygon Modeling with Paint Effects NURBS Modeling in Maya-UnderstandingNURBS,EmployingImagePlanesModelingNURBSSurfacesCreatingRealism NURBS Tessellation

References:

1. MasteringMaya 2017byEricKeller.
2. IntroducingMaya 2017byDariushDerakhshani
3. CompleteMayaProgrammingVolumeIIAnIn-depthGuideto3DFundamentals,Geometry, and Modeling.
4. GameCharacterDevelopmentwithMaya.
5. 2DArtworkand3DModelingforGameArtists.

PracticalBasedonBasicsof3DAnimation

1. Howdo youmake acubein3D.
2. Howdoyoumake texturetocube
3. Howdoyouuseimage plan
4. Howdoyourotateobject in3D
5. Howdoyoumirrorin3D
6. Howdoyoucentera modelin 3D
7. Howdoyouduplicatein3D
8. Howdoyoufill holein3D
9. Howdo smoothobjectin3D
10. Howdoyouuse thesnap tool

B.Sc.PartII-Animation Semester –III

DSC-AN-C2:Riggingin3DAnimation

TotalContactHours:36hrs.(45lecturesof48minutes) Credits: 03 Theory: 3.2 Lect./Week Total Marks:50.

CourseOutcomes:

1. StudentslearnaboutRiggingprocessinMaya,theyareelaboratedwithcreationofdifferent kind of rigs for characters and objects.
2. StudentslearnanimationMaya,theypracticetoapplyvariousanimationprinciplesandlearn different tools for Animation in Maya.
3. Studentlearnvarioustechniquesof Animationin Maya.

UnitI **18hrs**

UnderstandingRigging,CreatingandOrganizingJointHierarchies,OrientingJoints,Naming Joints, MirroringJoints,RiggingtheGiraffe,IKLeg,FKBlending,RotatePlaneSolvers,Creating Custom AttributesSplineIK, FullBodyInverseKinematics,SkinningGeometry

UnitII **18 hrs**

Interactive/SmoothBinding,WeightingtheGiraffe,PaintingSkinWeights,EditingSkinWeights in theComponentEditor,CopyingSkinWeights,MirroringSkinWeights,TheMaya Muscle System

UnderstandingtheMayaMuscleSystem,UsingCapsules,CreatingaMuscleUsingMuscle Builder, EditingMuscleParameters,ConvertingtheSmoothSkintoaMuscleSystem,SlidingWeights

References:

1. MasteringAutodeskMaya2017byEricKeller.
2. IntroducingMaya 2017byDariushDerakhshani.
3. BodyLanguage: Advanced3DCharacterRigging
4. AnEssentialIntroductiontoMayaCharacterRigging

Handbook of Rigging

PracticalBasedonRiggingin3DAnimation

1. Howdoyou rigobjectin3DAnimation?
2. Howdoyourig a3Danimation?
3. Whatareriggingtools?
4. Howdoyouanimateriggingin3D Animation?
5. Canyouriga3Dmodel?
6. Howdoyou rigalowpolycharacter?
7. Howdoesa rigger work?
8. Howdoyouattachanobject toananimationin3DAnimation?

B.Sc.PartII-Animation Semester –III

DSC-AN-C3:Cinematography

TotalContactHours:36hrs.(45lecturesof48minutes) Credits: 03 Theory: 3.2 Lect./Week Total Marks:50

CourseOutcomes:

1. Workinexperimentalandmanipulativetechniques,candidandcontrivedimagery, documentary photography, archival processing, and interpretive studies.
2. Familiarwithandcommandofmaterials,equipment,andlibraryresourcesrelatedtothe study of photography.
3. Workandstudy independently.
4. Understandvisualformsandtheiraestheticfunctions,andbasicdesignprinciples,developing throughout the degree program, with attention to such areas as design, color, and lighting.
5. Understand the industrial and commercial applications of photographic techniques design principles,developingthroughoutthedegreeprogram,withattentiontosuchareasasdesign, color, and lighting.

UnitI **18 hrs**

IntroductiontoCinematography,FilmDimension,FilmPackaging,Processingand Printing, Films inMotionPictures,ScreeningofFilms,CamerasforMotionPicture,

UnitII **18 hrs**

DifferenttypesofShootingformats,VariousCameratests,Audio andvideoediting,Screeningoffilms,Demo reel, Film Packaging, Shooting through Mirrors, Rigging the Camera, Digital Film Production, Aerial Photography, Different types of film cameras, Cinema Projection,

References:

1. Cinematography:TheoryandPractice:Image MakingforCinematographersandDirectors
2. TheFilmmaker'sEye:Learning(andBreaking) theRulesofCinematic Composition
3. TheFiveC'sofCinematography: MotionPictureFilming Techniques
4. FilmTheoryAnIntroductionThroughTheSenses
5. FocalPress Book:TheCompleteFilm ProductionHandbook

PracticalBasedonCinematography

1. Howdoyoustart cinematography?
2. Howdo ushootcinematography?
3. Howimportantis cinematography?
4. Howdoyoumakeagoodcinematography?
5. HowcanIpracticecinematographyathome?
6. Howcan becomeabettercameraman?
7. Howdoyoubecomeasportscamera operate?
8. HowdoyoueditingAudioand video?
9. HowdoyouShootingthroughMirrors?
10. HowdoyoutestVariousCamera?

B.Sc.PartII-Animation Semester –III

DSC-AN-C5:MotionGraphics

TotalContactHours:36hrs.(45lecturesof48minutes) Credits: 03

Theory: 3.2 Lect./Week Total Marks:50

CourseOutcomes:

1. Employtheterminologyofmotiongraphicdesignwhenpresenting,critiquing,ordiscussing, motion graphic design ideas and solutions.
2. Analyzemotiongraphicsincontemporaryandhistoricalcontexts.
3. Applygraphicdesignprinciplestotime-based works.
4. Producemotiongraphicsinarangeofprofessionally-recognizedforms.
5. Utilizeappropriate contentandtechniquestotella story.
6. Compileaportfolioofmotiongraphicdesign.

UnitI18 hrs

MotionGraphics:A Perspective:HistoryofMotionGraphics,MotionGraphicsinFilmand Television, The Pictorial Composition, Space and Composition: An Overview, Principles of Composition, Constructing Space ,
TheSequentialComposition:Overview,Formsofcontinuity, FormsofDiscontinuity,Montage,

UnitII **18hrs**

Conceptualization: Assessment, Formulation, Cultivation, Storyboards, Animatics 9, AnimationProcesses:Frame-by-frameAnimation,Interpolation,SpatialInterpolation,Visual Interpolation ,Temporal Interpolation ,Coordinating Movement,
MotionGraphicsCompositing:Compositing:AnOverview,BlendOperations,KeyingAlpha Channels, Mattes, Masks,

References:

1. MotionGraphicDesign:AppliedHistoryandAesthetics.Author:JonKrasner.ISBN: 9780240809892. Publisher: Focal Press.
2. DesignforMotion:Fundamentalsandtechniquesofmotiondesign.Author:AustinShaw, Focus Press, 2015 ISBN 10-1138812099.
3. CreatingMotionGraphicswithAfterEffects
4. Hands-OnMotionGraphicswithAdobeAfterEffectsCC
5. AdobeAfterEffectsCCClassroomin aBook

PracticalBasedonMotionGraphics

1. Howdoyouplanamotion graphic?
2. Whatistheprocessofmotion graphic?
3. Howdoyouanimateapicture?
4. Howdoyoustartmotion graphic?
5. Howdoyoucreateamotiongraphictemplate?
6. Howdoyoumakeanimatedvideosonandroid?
7. Howcanyouturnurphotointoacartoon?
8. Howdoyoumovingvideowithpictures?
9. Howdoyoumakegraphicnovel?
10. Howdoyoumakesimplecomic?

B.Sc.PartII-Animation Semester –IV

DSC-AN-D1:Advanced3DAnimation

TotalContactHours:36hrs.(45lecturesof48minutes) Credits: 03

Theory: 3.2 Lect./Week Total Marks:50

CourseOutcomes:

1. Useappropriatetoolsandtechniquestoproducepolygonalobjectsofvaryingcomplexity (hard surface based and organic based) that can be used in games and animation media.
2. Createandfullytexturealow-polygon model foruse inagame engine.
3. Createorganiclooking3D objects.
4. DesignUVlayout,andtexture3D objects.
5. Todeveloptheskill& knowledgein3DModeling.
6. Studentswillunderstandtheknowhowandcanfunctioneitherasanentrepreneurorcantake up jobs in the multimedia and animation industry, video studios, edit set-up and other Special Effects sectors.

UnitI18 hrs

UsingJointsandConstraints,InverseKinematics,KeyframeAnimation,TheGraphEditor, Playblast
andFCheck,DrivenKeys,AnimationUsingExpressions,MotionPathAnimation,Animating Constraints.

UnitII **18hrs**

AnimationLayers,CreatinganAnimationLayer,AnimatingFacialExpressionsUsingBlend Shapes, AnimatingBlendShapesSequentially,AnimatingwithLattices,AnimatingObjectComponents with Clusters,AnimatingaSceneUsingNonlinearDeformers,CreatingaJiggleEffect,Optimizing Animations with the Geometry Cache.

References:

1. MasteringMaya 2017byEricKeller.
2. IntroducingMaya 2017byDariushDerakhshani

CompleteMayaProgrammingVolumeIIAnIn-depthGuideto3DFundamentals,Geometry, Game Character Development with Maya.

1. 5.2DArtworkand3DModelingforGame Artists.

PracticalBasedonBasicsofAdvanced 3DAnimation

1. AssignmentonTableandchair.
2. AssignmentonHumanBodyModel.
3. AssignmentonFaceModel.
4. AssignmentonFruitDishModel.
5. AssignmentonBikeandanimate.
6. AssignmentonCarmodelandanimate.
7. AssignmentonPathanimation.
8. AssignmentonCameramovements.
9. AssignmentonFlagsimulation.
10. AssignmentonGarmentmaker.

B.Sc.PartII-Animation Semester –IV
DSCAN-D2:Renderingin3DAnimation
TotalContactHours:36hrs.(45lecturesof48minutes) Credits: 03 Theory: 3.2 Lect./Week Total Marks:50

CourseOutcomes:
1. Studentslearndifferentkindsoflightsandlightsetupina Maya scene.
2. Studentslearntouselightsand toset theirattributesmore precisely.
3. Studentslearnstocreate shadows
4. FoginMayalightingsystem.
5. Finallystudentsaretrainedtoget finaloutputoftheirsceneusingvarious rendering

UnitI18 hrs
UsingthePaintEffectsCanvas,Paintingon3DObjects,UnderstandingStrokes,Designing Brushes, RenderingPaintEffects,UsingToonShading, RenderLayers, RenderPasses.

UnitII 18hrs
RenderPassContributionMaps,SettingUpaRenderwithmentalray,mentalrayQuality Settings, UsingFluidContainers,CreatingaReaction,RenderingFluidContainers,CreateFluidsand nParticle Interaction.

References:
1. MasteringMaya 2017byEricKeller.
2. IntroducingMaya 2017byDariushDerakhshani
CompleteMayaProgrammingVolumeIIAnIn-depthGuideto3DFundamentals,Geometry, Game Character Development with Maya.
2DArtworkand3DModelingforGame Artists.

PracticalBasedonBasicsofRenderingin3DAnimation
1. AssignmentonTableandchair
2. AssignmentonHumanBody Model
3. AssignmentonFaceModel
4. AssignmentonFruitDishModel
5. AssignmentonBike
6. AssignmentonCarmodel
7. AssignmentonBookcover
8. AssignmentonMagazinecover
9. AssignmentonCDcover
10. AssignmentonWoodcarving

B.Sc.PartII-Animation Semester –IV

DSC-AN-D3:DigitalEditing

TotalContactHours:36hrs.(45lecturesof48minutes) Credits: 03

Theory: 3.2 Lect./Week Total Marks:50

CourseOutcomes:

1. Studentwilllearnsoundeditingfor songs andunderstandvariousdigitalaudioformats.
2. Studentwillgainskillforrecording&mixingwithsong.
3. Studentwilllearnspecialeffectforaudioandunderstandtheloops,playlists.
4. Studentwillintroducedtovideoeditingsoftware&editvideosfor movie/presentationand understand various digital video formats. Student will learn special effect for movie like Star trek transporter effect, Blurring a part of an image,
5. Ghosteffect,highlightinga partofanimage etc.

UnitI18 hrs

Manipulatingaudio:Autotrim/crop,mute,DCoffset,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 audiofileformatslikeMP3, realaudio,QuickTimeformats,etc.Eventtool:move,split,slipand trim multipleevents,createfades,applyASRattack/sustain/release),etc. Spectrumanalysistools,scrubtooletc,statisticstool(Max,RMS,DCoffset,zerocrossings), sampler tool etc, Audio editing: workflow, real time editing, event based editing, waveform volume andpanenvelopes,Edit,record,encodeandmasterdigitalaudio,editingaudio bydraganddrop options, cross fading audio tracks, balancing sound levels, creating smooth fades etc. UnderstandingMultichannelaudiorecording,synchronizeaudioandvideo.Understanding regions andplaylists,editingoffields,name markers,loops,andregions,Timeandframes.Audioeffects like: EQ, 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

UnitII18hrs

Premiere:Conceptofnonlinearediting,Thebasicsofediting:OverviewImportingand Exporting: variousaudio,videoandgraphicsinvariousformatsEdit,manipulateandarrange theseelements in visualtimeline,understandallToolsontoolboxfor editingclips.,Titlingandsuperimposing, Panels: Tools panel, Project, Monitors: Source and program, Timeline, Audio meters, Misc. Tasks andfunctions:Titles,Transitions,speedandduration,Effects,Keyframes,Typesofedit,Opacity, trimming, Adding Special effects like: Star trek transporter effect, Blur part of an image, Ghost effect, Highlight part of an image etc.

References:

1. FilmEditing:GreatCutsEveryFilmmakerandMovie LoverMust.KnowAuthor:Gael
2. AppleFinalCutProX:In-DepthwithLarryJordanProfessionalvideoeditingmadeeasy
3.Professional video editing made easy
4. IntheBlinkofAnEye: 2ndEdition:NewEdition
5. TheTechniqueofFilm andVideoEditing: History,Theory,andPractice”byKenDancyger

B.Sc.PartII-Animation

DSC-AN-A4:ClassicalAnimation

TotalContactHours:36hrs.(45lecturesof48minutes)

Credits: 02

Theory:03Lect./Week

Unit-I

Historyof Animation,
Overviewoftheprocesspreproduction,Production&postproduction, Perspective,
Background Design,
Scriptwritingprocess.
Effects Animation1.
IntroductionStoryboard,
Storyboard Layout.
AssistingAnimation,
Color Theory,
Effects Animation2,
StoryboardingFinalFilmConcept

Unit-II

Art Direction,
AnimationFinalFilmProject,
Layout Recap, Premiere,
Sound Breakdown.
DigitalInkand Paint,
2D Digital Animation Sound,
Photoshop,Adobeflash.Toonboom

References:

1. TheAnimatorSurvivalKitbyRichardsWilliams
2. BasicDrawingTechniquesbyRichardsBox
3. DrawingandAnatomybyVictor Petard
1) TheAnimatorSurvivalKitbyRichardsWilliams
2) BasicDrawingTechniquesbyRichardsBox
3) DrawingandAnatomy byVictorPerard
4) SketchingbyPratapMulik
5) HumanAnatomyforArtistbyEliotGoldfinger
6) HowtoDraw BabyAnimalbySusanSonkin
7) CartoonAnimationbyPrestonBlair
8) Humananatomy byVictorFerard
9) Figuredrawingmadeeasy byAdityaChari
10) HowtoDraw Human FiguresbyPundalikWaze