



JAWAHARLAL NEHRU ARCHITECTURE AND FINE ARTS UNIVERSITY
Mahaveer Marg, Masab Tank, Hyderabad – 500 028.

Academic Regulations for B.F.A. Programs
(Under the CBCS, Effective from the Academic Year 2017-2018)

Preamble:

JNAFAU's Choice Based Credit System (CBCS) aims to provide comprehensive learning opportunities which takes into account individual interests and abilities of the students. Apart from the compulsory core courses, the students can choose from the elective courses on offer in the university or also from approved online platforms like the MHRD's SWAYAM or MOOCs.

These regulations are subject to amendments as may be decided by the Academic Council / Committee of the University from time to time. Any or all such amendments will be effective from such date and to such batches of students (including those already in the middle of the program) as may be decided by the Academic Council / Committee.

1. Glossary of Terms

- 1.1. **Program:** An educational program leading to award of a Degree in a discipline.
- 1.2. **Course:** Generally referred as a 'subject' offered under the degree program. Each course is identified by a unique course code and course title. A course may be designed to comprise lectures/ studio/tutorials/ laboratory work/ fieldwork/ outreach activities/ project work/vocational training /seminars /term papers/ assignments/ presentations/ self-study etc. or a combination of some of these. All courses do not carry the same credits.
- 1.3. **Choice Based Credit System (CBCS):** In addition to the compulsory core courses in a program, CBCS provides **choice** for students to select from a number of elective courses offered. The term **credit** refers to the weightage given to the course and is usually the number of periods per week allotted to it.
- 1.4. **Re-admission:** When a student is detained in a course due to shortage of attendance or the student takes a break of study, the student has to take re-admission to continue the program.
- 1.5. **Re-registration:** When a student has failed in a course due to low internal assessment marks, but has satisfactory attendance, the student can re-register to improve performance in internal assessment as well as external evaluation.
- 1.6. **Re-appearance/ supplementary examinations:** When a student has failed in a course and wishes to improve performance only in end semester external examination he/she can register to reappear for the supplementary examination.

- 1.7. **Minimum Total Credits (MTC):** These are minimum total credits to be secured by a student to be considered eligible for award of the degree. This may be different for different disciplines.
- 1.8. **Director of Evaluation (DE)** means the Authority of the University who is responsible for all activities of the End Semester Examinations of the University.
- 1.9. **Director, Academic and Planning (DAP)** means the authority of the University who is responsible for all academic activities for the implementation of relevant rules and regulations.

2. Program Structure

- 2.1. **Category of Courses:** The program shall have a curriculum with syllabi consisting of courses as prescribed by the Board of Studies, and broadly categorized under:
 - 2.1.1. **Compulsory Core (CC)** are courses deemed to be the core learning required for the discipline. These courses are part of the compulsory requirement to complete the program of study. A core course cannot be substituted by any other course. A core course offered in this program may be treated as a Professional or Open Elective by other programs.
 - 2.1.2. **Professional Electives (PE)** are courses which are elective courses relevant to the discipline. An Elective course is generally a course that can be chosen from a pool of courses on offer. Every student shall be required to opt for the electives from the list of electives offered. Students can also opt for the electives on offer from any of the other Programs, besides his / her own discipline courses, or even do online courses subject to the respective Program specific regulations.
 - 2.1.3. **Open Electives (OE)** are chosen generally from an unrelated discipline/ subject, with an intention to seek exposure/ add generic proficiency. These may include Liberal Arts courses, Humanities and Social Science courses, etc. and essentially facilitate the student to do courses (including Core Courses or Professional Electives) offered by other departments/ programs / institutions or online. Open Electives may not be specified in the course structure and the University may approve and offer any Open Elective courses in any semester as an option for the students.
 - 2.1.4. **Ability Enhancement Courses (AEC).** These are mandatory courses based upon content that lead to general knowledge, ability and soft skills enhancement, such as, Environmental Studies, Communication Skills, Value Education, etc.
 - 2.1.5. **Non- Credit Courses / Activities mandatory for award of Degree:** There are some non-credit courses / activity such as: 1) Co-Curricular Activity / Extension Activity (EA), 2) any other as specified in the respective course structure / syllabus. A 'Satisfactory' grade in the above, is compulsory for the award of degree.

2.1.6. **Online Courses:** Students may be permitted, with the prior approval of the Department, to take online courses through SWAYAM or MOOCs or any other approved online facility, in lieu of the Electives (both PE and OE) offered in the University.

2.2. **Credits:**

2.2.1. Credits are indicative of the importance of the course. In the case of core courses 1 period of direct teaching per week (Theory / Tutorial/ Studio/ Practical) = 1 credit

2.2.2. In the case of other courses like the Electives and the AEC courses, the credits are based on their level of importance as decided by the Board of Studies and as described in their respective course structures.

2.3. **Pre-requisites:** Some of the courses may have pre-requisites (i.e. the student may be required to have registered and attended the course specified as a pre-requisite.)

2.4. **Types of Courses and Learning Sources**

Types of Courses	Learning Sources
Compulsory Core (CC)	Parent Department (PD)
Professional Elective (PE)	PD / OD / online
Ability Enhancement Course (AEC)	PD / OD / online / Univ.
Open Elective (OE)	PD / OD / online / Univ.
Extension Activity (EA)	PD, OD, Univ.

Note: PD = Parent Department; OD = Other Departments / Institutions / Universities

3. **Duration of Program**

3.1. A student is normally expected to complete the Program in four academic years (8 Semesters) but in any case not more than 8 years (including break of study for personal reasons or suspension/ detention due to disciplinary action, etc.).

3.2. Each semester shall normally consist of 90 working days (excluding end semester examination days).

3.3. **Gap Year:** A student may be permitted to take a break of study for one academic year for starting an enterprise or for any personal or medical reason with prior approval. In exceptional cases, this may be extended to another year after an appraisal process approved by the State Govt. / University. In such cases also the student will be eligible for award of First Class with Distinction/ other awards. Rules of re-admission will apply to such cases.

4. Registration for choice of Electives:

- 4.1. Each student shall be deemed to have registered for **all the compulsory core and other mandatory (AEC) courses** of every semester that he/she is admitted to / promoted to, on the payment of the requisite fees.
- 4.2. However, in the case of electives (as per the course structure), students shall submit their preferences from the list of electives on offer (including approved online courses), and after allotment of the elective course, register for elective courses of their choice – both professional and open electives.
- 4.3. The information on the list of all the courses offered in every department specifying the course code, course title, credits, prerequisites, the timetable slots and the registration process with the time schedules will be made available on the University website. Every student is expected to go through the above information, consult the faculty members, understand the choices and select their choice of elective courses.
- 4.4. Every student shall submit their preferences from the list of electives on offer (including approved online courses), register / re-register as per the registration process and the schedule notified.
- 4.5. The departments shall put up the list of electives allotted to the students, using their (departments') discretion based on physical and other capacities, with first preference given to the students from the parent department and later, considering a first come first and/or SGPA basis for students from other departments. However, students who have registered for elective courses previously are allowed to re-register for courses in which they have failed.
- 4.6. In case none of the student's preferred choices is allotted, or even otherwise, the student may propose an alternative choice from among the available ones after due consultation with the respective faculty. In any case, the students shall register (which is effected only on their choice of elective being approved) for the courses within the given schedule/ deadline.
- 4.6. After registering for a course, a student shall attend the classes, satisfy the attendance requirements, earn Internal Assessment marks and appear for the End Semester Examinations.
- 4.7. A student is permitted to cancel his/her registration for the elective courses, within two weeks of starting of the semester.
- 4.8. To enable the students to choose electives from across the departments, the DAP shall in consultation with all the departments, facilitate the announcement of a common time-slot for the elective periods in the individual time tables of the departments.
- 4.9. No elective course shall be commenced unless a minimum number of students are registered (this number may be different for different courses and Programs and may be decided by the Departments / College/ University every semester).

5. Attendance Requirements

- 5.1 A student has to put in a minimum of 75% of attendance, in aggregate of all the courses registered in the semester (excluding approved online elective courses) for becoming eligible to register for the end examinations and for acquiring credits in each semester.
- 5.2 Shortage of attendance in aggregate up to 10% (65% and above, and below 75%) in each semester may be condoned by the College Academic Committee on genuine and valid (including medical grounds), based on the student's representation with supporting evidence.
- 5.3 Condonation of shortage of attendance as stipulated above, shall not be automatic but on the merits of the case to the satisfaction of the College Academic Committee.
- 5.4 A stipulated fee shall be payable along with the application for condonation.
- 5.5 Shortage of attendance below 65% in aggregate (including medical grounds) shall in no case be condoned.
- 5.6 A student will not be promoted to the next semester unless the attendance requirement of the present semester is satisfied. In case of such detention the student is not eligible to take the End Examination of that semester and the course registration shall stand cancelled. The student shall seek re admission for that semester when offered next.
- 5.7 In the case of re-registration (clauses 10.4 to 10.7) for a course/s, the attendance requirement is not applicable.

6. Assessment

- 6.1 **Distribution of Internal Assessment and End Exam Marks:** Performance in each course shall be evaluated as prescribed in the respective Program's course structure and syllabus. As a general pattern, 50% of the marks in a course are through internal assessment and 50% through end semester examinations. A few courses may have 100% of the assessment purely through internal assessment. The thesis, the internship courses and many of the studio courses are assessed through a jury and viva-voce for the end semester examination.
- 6.2 **Schedule for Internal Assessment:** The students shall diligently follow the given internal assessment schedule for the semester including submissions and tests.
- 6.3 The compiled cumulative internal assessment marks and attendance of the students will be displayed periodically at least twice during the Semester, for information to the students. 50% of the marks allotted for the internal assessment courses shall be submitted before the 12th week. All internal assessment marks have to be finalized and uploaded / submitted in the prescribed format, on or before the last day of End Semester Examinations of the semester.

- 6.4 **Assessment for Online Courses:** In case of credits earned through approved online modes, the credits and grades shall be assigned by a committee consisting of Head of the Department or a teacher nominated by the HoD and a senior faculty member nominated by the DAP/ Principal (in case the credits or grades are not included by the online course faculty).
- 6.5 **Non-Credit, Mandatory Courses / Activity:** Assessment in these courses or activity will be only in terms of "Satisfactory" or "Not Satisfactory". A 'Satisfactory' grade in these listed courses/ activities is compulsory for the award of degree.
- 6.5.1 Co-Curricular Activity / Extension Activity (EA) (for all round development) : Every student has to participate in any one of the following activities like NCC/ NSS/ Sports/ FSAI University's Pro-bono project activity/ any national or international student camp /any other community development activity listed by the University and acquire a "Satisfactory" grade to be considered eligible for award of a degree.
- 6.5.1.1 The student's performance shall be examined by the faculty in-charge of the relevant extension activity along with the Head/ Coordinator of the Department/ activity.
- 6.5.1.2 Physically challenged students who are unable to participate in any of the above activities shall be required to take an appropriate test in the relevant area of any one of the above activities and be graded and certified accordingly.
- 6.5.2 Any other course or activity as specified (including the mode of assessment) in the respective course structure or syllabus.

7. Award of Letter Grades

- 7.1 The performance of a student will be reported using letter grades, each carrying certain points as detailed below:

S. No.	% of Marks		Letter Grade	Grade Points
	Minimum	Maximum		
1.	90.00	100.00	A+	10
2.	80.00	89.99	A	9
3.	70.00	79.99	B	8
4.	60.00	69.99	C	7
5.	50.00	59.99	D	6
6.	40.00	49.99	E	5
7.	00.00	39.99	F	0
8.	<i>Shortage of attendance and hence prevented from writing end semester examination</i>		SA	0
9.	Absent for End semester		Ab	0
10.	Satisfactory *		Satisfactory	0

Note: * Satisfactory grade will be given only for the non-credit courses/ activity such as mentioned in clause 6.5. A 'Satisfactory' grade in these listed course/ activities is compulsory for the award of degree.

Example of assignment of letter grade and grade points for marks:

Course Title	Int. Marks	End Exam	Total	Grade	Grade point (GP)
Course X1	22	25	47	E	5
Course X2	39	41	80	A	9
Course X3	37	34	71	B	8
Course X4	29	30	59	D	6
Course X5	25	24	49	E	5

7.2. A student who earns at least an E grade in a course is declared to have successfully completed the course, and is deemed to have earned the credits assigned to that course. A course successfully completed cannot be repeated.

7.3. Students who fail to appear for end semester examinations will be marked as 'Ab' (Absent) and should register for supplementary examination by paying the prescribed fees.

8. Academic Requirements: The following academic requirements have to be satisfied, in addition to the attendance requirements mentioned in clause 5.

8.1 A student shall be deemed to have satisfied the academic requirements and earned the credits allotted to each subject/ course, if the student secures not less than 40% marks in the semester end examination, and a minimum of 40% of marks in the sum total or aggregate of the Internal Assessment and Semester End Examination taken together; in terms of letter grades, this implies securing 'E' grade or above in that subject/ course.

8.2 A student eligible to appear in the end semester examination for any course, but absent from it or failed (thereby failing to secure 'E' grade or above) may reappear for that course in the supplementary examination as and when conducted. In such cases, the internal marks obtained earlier for that course will be retained, and added to the marks obtained in the end semester supplementary examination for evaluating performance in that course.

9. Promotion between Semesters:

9.1. A student shall be promoted from odd to even semester if the minimum requirement of attendance as in clause 5 is fulfilled.

9.2. A student shall be promoted from even to odd semester, if the minimum requirement of attendance as in clause 5 is fulfilled and as per the other requirements specified in the following table.

9.3. Table indicating promotion requirements from even to odd semesters:

From 2 nd sem. to 3 rd sem.	If the student does not have more than three backlog courses in the 1 st semester.
From 4 th sem. to 5 th sem.	Secured all the credits upto 2 nd semester and does not have more than three backlog courses in the 3 rd semester
From 6 th sem. to 7 th sem.	Secured all the credits upto 4 th semester and does not have more than three backlog courses in the 5 th semester

10. Re-admission and Re-registration

- 10.1 A student may be detained in a semester either due to shortage of attendance, or due to having more than the permissible number of backlog courses. Students detained due to shortage of attendance may be re-admitted when the same semester is offered in the next academic year for fulfillment of academic requirements.
- 10.2 A student detained due to not having enough credits or having more than the permissible number of backlog courses, shall be promoted to the next academic semester only after fulfilling the requirements as per Table 9.3.
- 10.3 No grade allotments or SGPA/ CGPA calculations will be done for the entire semester in which student has been detained.
- 10.4 The academic regulations under which a student has been first admitted shall be applicable in all cases of re-admission.
- 10.5 If a student fails in a Professional Elective or an Open Elective, the student may re-register for the same or register afresh for any other Professional Elective or Open Elective course respectively in the subsequent semesters. In case of re-registration in the same courses, attendance is not mandatory, whereas registration for any other elective course/s requires the student to attend the classes and fulfill the attendance requirements as per Clause 5.
- 10.6 A student who fails in any course may be permitted the option of re-registering in that subject only if the internal assessment marks are less than 30%, so as to enable him/her to improve/redo and resubmit the work for internal evaluation. In such cases of re-registration, the student's previous performance both in the internal evaluation and end evaluation in the particular subject/s shall stand cancelled and he/she shall be required to appear for the end semester evaluation again (end examination and /or external jury as the case may be).
- 10.7 The maximum number of courses a student may be permitted for 're-registration' in a semester, is limited to three. Re- registration of any course should be done within 7 days from the date of declaration of the relevant results. A stipulated fee shall be payable towards re registration in any subject.

- 10.8 The student may attend classes in the case of the re-registered courses, if the student wishes. However, the attendance requirement is not compulsory for such courses.

11. Grade Points, SGPA and CGPA Calculation

- 11.1. After the results are declared, Grade Sheets will be issued to each student which will contain the list of courses registered during the semester and the performance in each with details of whether passing or failing, credits earned in that semester, promoted or not, letter grades, grade points, etc.

- 11.2. **Grade Points:** The grade points obtained in a subject multiplied by the credits for that subject will be the weighted grade points.

$$\text{Weighted Grade Points (WGP)} = C \times GP$$

Where 'C' is the number of credits assigned for the subject and 'GP' is the Grade Point obtained as per the Table in clause 7.1 above.

- 11.3. **SGPA:** The sum of the weighted grade points divided by the total number of credits in a semester will give the Semester Grade Point Average (SGPA).

$$SGPA = \frac{\sum C_i GP_i}{\sum C_i} \quad i = 1 \text{ to } n$$

Where n is the number of courses the student registered for in the semester, 'C' is the number of credits allotted to each of the courses, and 'GP' is the grade-point obtained by the student in the respective courses.

An example follows:

Course Title	Credits (C)	Grade (GP)	Weighted Grade Points (WGP)
Course X1	3	7	21
Course X2	8	8	64
Course X3	8	7	56
Course X4	7	7	49
Course X5	2	6	12
Course X6	2	6	12
Total	30		214
Semester Grade Point Average (SGPA) = Total WGP/ Total credits =			7.13

- 11.4. **CGPA:** The Cumulative Grade Point Average (CGPA) will be computed for every student as:

$$CGPA = \frac{\sum C_i GP_i}{\sum C_i} \quad i = 1 \text{ to } m$$

Where 'm' is the number of subjects registered for in all the semesters from the 1st semester onwards. 'C' is the number of credits allotted to each of the courses, and 'GP' is the grade-point obtained by the student in the respective courses.

- 11.5. The CGPA and SGPA will be rounded off to the second decimal place and recorded as such.
- 11.6. For the purpose of computation of the final CGPA, award of degree, award of the class as in clause 14, and other honours if any, including medals, the performance in the best MTC (Minimum Total Credits) only, as specified in Table in clause 12.2, will be taken into account.

12. Eligibility for the Award of Degree: A student shall be eligible for the award of the "B.F.A." Degree in the specific discipline into which he/she was admitted, if the following academic regulations are fulfilled:

- 12.1. Has pursued the program of study for not less than four academic years and not more than eight academic years. Students, who fail to fulfill all the academic requirements for the award of the degree within eight academic years from the year of their admission, shall forfeit their seat in the program and their seat shall stand cancelled.
- 12.2. Successfully secured the Minimum Total Credits required for the respective Programs.

Table : B.F.A. Programs and Credits

S.No.	B.F.A. Program	Total Credits	Minimum Total Credits (MTC)
1	Applied Arts & Visual Communication	240	225
2	Painting & Visual Communication	240	225
3	Sculpture & Visual Communication	240	222
4	Photography & Visual Communication	240	228
5	Animation	240	225

- 12.3. Successfully secured "Satisfactory" grades in all the mandatory non-credit courses/ activity.
- 12.4. Has secured a minimum of 5.0 CGPA
- 12.5. No disciplinary action is pending against the student.

13. Withholding of the results: The results of a student may be withheld if:

- 13.1. He/she has not cleared any dues to the University/Institution/Hostel.

13.2. A case of disciplinary action against the student is pending disposal.

14. Classification of the Degree Awarded

After a student has satisfied the requirements prescribed for the completion of the program and is eligible for the award of the B.F.A. Degree in the Program to which he/she was admitted, he/she shall be placed in one of the four classes as shown in the Table.

First Class with Distinction	1. 8.0 and above of CGPA. 2. Should have passed the examination in all the courses of all the eight semesters within five years, which includes any authorized break of study of one year (clause 3.3). 3. Should NOT have been prevented from writing end semester examination due to lack of attendance in any of the courses.
First Class	Below 8.0 but not less than 7.0 of CGPA and
Second Class	Below 7.0 CGPA but not less than 6.0
Pass Class	Below 6.0 CGPA but not less than 5.0

Note : In all the above cases CGPA shall be calculated from the Grade Points secured for the best MTC (Minimum Total Credits) (Refer Table in Clause 12.2)

15. **Malpractice:** If a student indulges in malpractice in any of the examinations, he/she shall be liable for punitive action as prescribed by the University from time to time.

16. General

16.1 In case of any doubt or ambiguity in the interpretation of the academic regulations, the decision of the Vice-Chancellor is final.

16.2 The University may from time to time revise, amend or change the Regulations, Curriculum, Syllabus and Scheme of Assessment.

**JNAFAU College of Fine Arts BFA Animation (4 years)
CBSE COURSE STRUCTURE**

Semester – I

S.No	Course Code	Course Title	Pre-requisites	L	S / F	P / T / O	Total	Credits	Int.	Ext.	Total	W / S / J / P
1	AN17B1.1C	Basic Drawing	Nil	1	6	P	7	7	50	50	100	P
2	AN17B1.2C	Story Development	Nil	4		T	4	4	50	50	100	W
3	AN17B1.3C	Modeling	Nil	1	5	P	6	6	50	50	100	P
4	FA17B1.2C	Colour Design	Nil	1	6	P	7	7	50	50	100	P
5	FA17B1.3C	History of Art & Aesthetics	Nil	2		T	2	2	50	50	100	W
6	GN17B1.1A	English	Nil	2		T	2	2	50	50	100	W
7	GN17B1.2A	Environmental Studies	Nil	2		T	2	2	50	50	100	W
							30	30	350	350	700	

Semester – II

S.No	Course Code	Course Title	Pre-requisites	L	S / F	P / T / O	Total	Credits	Int.	Ext.	Total	W / S / J / P
1	AN17B2.1C	Character Design	Nil	1	7	P	8	8	50	50	100	P
2	AN17B2.2C	Principles of Animation	Nil	1	7	P	8	8	50	50	100	P
3	AN17B2.3C	Story Boarding	Nil	1	5	P	6	6	50	50	100	P
4	AN17B2.4C	Script Writing	Nil	2		T	2	2	50	50	100	W
5	AN17B2.5C	History of Animation	Nil	2		T	2	2	50	50	100	W
6	GN17B2.1A	Communication Skills	Nil	2		T	2	2	50	50	100	W
7	GN17B2.2A	Value Education	Nil	2		T	2	2	50	50	100	W
							30	30	350	350	700	

Semester – III

S. No	Course Code	Course Title	Pre-requisites	L	S / F	P/ T/ O	Total	Credits	Int.	Ext.	Total	W/S /J/P
1	AN17B3.1C	Layout Design	AN17 B1.1C	1	5	P	6	6	50	50	100	P
2	AN17B3.2C	Digital Background Design	Nil	1	5	P	6	6	50	50	100	P
3	AN17B3.3C	Acting for Animators	Nil	2	4	P	6	6	50	50	100	J
4	AN17B3.4C	Effects Animation - Compositing	Nil	1	5	P	6	6	50	50	100	P
5	AN17B3.xE	Elective - 1	Nil	1	2	P	3	3	50	50	100	P
6		Open Elective - 1	Nil					*				
							30	30	250	250	500	

Semester – IV

S. No	Course Code	Course Title	Pre-requisites	L	S / F	P/ T/ O	Total	Credits	Int.	Ext.	Total	W/S /J/P
1	AN17B4.1C	Character Animation	AN17 B3.3C	1	5	P	6	6	50	50	100	P
2	AN17B4.2C	2D - Digital Compositing	Nil	1	5	P	6	6	50	50	100	P
3	AN17B4.3C	Digital Photography	Nil	1	5	P	6	6	50	50	100	P
4	AN17B4.4C	Portfolio-2D	Nil	1	5	O	6	6	50	50	100	J
5	AN17B4.xE	Elective - 2	Nil	1	2	P	3	3	50	50	100	P
6		Open Elective - 2	Nil					*				
							30	30	250	250	500	

Semester – V

S. No	Course Code	Course Title	Pre-requisites	L	S /F	P /T / O	Total	Credits	Int.	Ext.	Total	W/ S/ J/ P
1	AN17B5.1C	3D Props & Sets Modeling	Nil	1	5	P	6	6	50	50	100	P
2	AN17B5.2C	3D Character Modeling	AN17 B2.1C	1	5	P	6	6	50	50	100	P
3	AN17B5.3C	Texturing	FA17 B1.2 C	1	5	P	6	6	50	50	100	P
4	AN17B5.4C	Rigging	Nil	1	5	P	6	6	50	50	100	P
5	AN17B5.xE	Elective - 3	Nil	1	2	T	3	3	50	50	100	P
6		Open Elective - 3	Nil					*				
							27	27	250	250	500	

Semester – VI

S. No	Course Code	Course Title	Pre-requisites	L	S /F	P /T / O	Total	Credits	Int.	Ext.	Total	W/ S/ J/ P
1	AN17B6.1C	Lighting	FA17 B1.2 C	1	6	P	7	7	50	50	100	P
2	AN17B6.2C	3D Character Animation	AN17 B4.1C	1	6	P	7	7	50	50	100	P
3	AN17B6.3C	Roto Prep	Nil	1	4	P	5	5	50	50	100	P
4	AN17B6.4C	3D Camera Techniques & Rendering	Nil	1	4	P	5	5	50	50	100	P
5	AN17B6.xE	Elective - 4	Nil		3	P	3	3	50	50	100	P
6		Open Elective - 4	Nil					*				
							27	27	250	250	500	

Semester – VII

S. No	Course Code	Course Title	Pre-requisites	L	S /F	P /T / O	Total	Credits	Int.	Ext.	Total	W/ S/ J/ P
1	AN17B7.1C	Dynamics	AN17 B5.1 C	1	5	P	6	6	50	50	100	P
2	AN17B7.2C	VFX Compositing	AN17 B6.3 C	2	4	P	6	6	50	50	100	P
3	AN17B7.3C	3D Facial Animation	AN17 B6.2 C	1	4	P	5	5	50	50	100	P
4	AN17B7.4C	Seminar on Animation & VFX	Nil	2	3	O	5	5	50	50	100	J
5	AN17B7.5C	Video Shooting & Editing	Nil	1	4	P	5	5	50	50	100	P
6	AN17B7.1E	Elective - 5	Nil	1	2	P	3	3	50	50	100	P
							30	30	300	300	600	

Semester – VIII

S. No	Course Code	Course Title	Pre-requisites	L	S /F	P /T / O	Total	Credits	Int.	Ext.	Total	W/ S/ J/ P
1	AN17B8.1C	Internship	Nil		8	O	8	8	50	50	100	J
2	AN17B8.2C	Dissertation			7	O	7	7	100	100	200	J
3	AN17B8.3C	Final Project			15	O	15	15	100	200	300	J
							30	30	250	350	600	

*** Note: The total credits are based on the assumption that the open elective will be of 3 credits**

3rd Semester

1	AN17B3.1E	Conceptual Art
2	AN17B3.2E	Dynamic figure drawing

4th Semester

1	AN17B4.1E	Comic Art
2	AN17B4.2E	Illustration

5th Semester

1	AN17B5.1E	Advanced Character Animation
2	AN17B5.2E	Advanced Modeling

6th Semester

1	AN17B6.1E	3D Virtual Animation
2	AN17B6.2E	Digital Sculpting

7th Semester

1	AN17B7.1E	Camera Tracking / Match Move
2	AN17B7.2E	Paint Finalizing

I Semester

Code: AN17B1.1C

BASIC DRAWING

Pre-requisites	L	S/F	P/T/O	Total Credits	Int.	Ext.	Total	W/S/J/P
Nil	1	6	P	7	7	50	50	100 P

The course is designed to give students understand the form by learning to see and utilize light, shadow, and basic perspective. And to build the ability to focus and analyze complex subject matter through long, in-depth, sustained drawing projects rendered in different black and white media. The subjects considered will be still-life, drapery, and plaster casts.

Unit-1: STUDY OF FIGURES CASTED FROM BASIC FORMS (PLASTER/ CLAY/ CARD BOARD/ WOOD ETC.)

- Basic shapes
- Four Basic shapes in value
- Basic composition & light

Unit-2: HEAD STUDY

- Study of Head Shapes like oval, hexagonal, squarish & round
- Study of different views like front, three quarter, side; Draw eyes, nose, ears & Lips,

Unit-3: STUDY OF SHAPE

- Masses of the Head,
- Study of Torso
- Column Forms of the Arms and Legs
- Masses of the Figure
- Perspective projection of the Figure - Foreshortening

Unit-4: STUDY FROM NATURE

- Insects, Birds and Animals
- Ponds, Rocks, Trees, Plants, Flowers, etc,

Unit-5: ANATOMY TRADITIONAL AND REALISTIC APPROACH

- Basic human figure proportions of various age group (male/female)
- Fundamental postures (sitting, standing, walking) etc,

Unit-6: INTRODUCTIONS TO BASIC PERSPECTIVE

- Simple perspective explanation
- One and two point perspectives

ASSIGNMENT:

Submit a minimum of 10 sketches as each of the above topics in the medium mentioned in the class.

Explore to create 5 Realistic & Traditional drawings of people in situations (including all types and ages engaged in a variety of actions & poses where in costumes of today & previous era regardless of medium is incorporated) Perspective assignments

Code: AN17B1.2C

STORY DEVELOPMENT

Pre-requisites L S/F P/T/O Total Credits Int. Ext. Total W/S/J/P

Nil 4 T 4 4 50 50 100 W

Narrative Story development is a required writing class, where the students share their fiction through workshops.

The course is designed to learn the elements of narrative storytelling: dialogue, point of view, character development, plot, setting and variations in narrative genre. Students learn to visualize and dramatize, using the written word as their artistic medium, and to choose effective and grammatically correct language. Emphasis is placed on the value of revision.

Unit -1 NARRATIVE ELEMENTS AND TOOLS NARRATIVE GENRES, STORY SOURCE: Required a writing on a topic, share fiction through workshop

Unit -2 IDENTIFYING CHARACTER, STORY BEGINNINGS: Understand, identify, and use the elements to use the tools for story telling techniques using effective Language.

Unit -3 IDENTIFYING VOICE, POINT OF VIEW NARRATORS: Dialogue, point of view, character development, plot setting, variations and gain exposure to alternative narrative genres.

Unit -4 Work Shop

Code: AN17B1.3C

MODELLING

Pre-requisites L S/F P/T/O Total Credits Int. Ext. Total W/S/J/P

Nil 1 6 P 7 7 50 50 100 P

Enables the student to understand the geometrical shapes its construction, Characteristics in 3D form. Construct these shapes by using clay, mount board, thermo coal etc.

Unit -1: Understanding the geometrical forms and construction of the above mentioned by using clays, and mount board.

Unit -2: Intersection and overlapping of different geometrical shapes

Unit -3: Creating spaces inside the different geometrical shapes

Unit -4: Working with still life objects like fruits, vegetables, vases, human body parts etc.

Code: FA17B1.2C

COLOUR DESIGN

Pre-requisites L S/F P/T/O Total Credits Int. Ext. Total W/S/J/P

Nil 1 6 P 6 6 50 50 100 P

Enable the students to produce successful visuals through an in-depth study of the elements, principles, concepts of colour and design. Principles will include contrast, balance, unity, rhythm, symmetry/ asymmetry, and visual emphasis to gain the ability to harmonise colour through colour schemes, and understanding the influence of light on forms. All projects incorporate colour principles covered to emphasize craftsmanship and clean presentation.

Unit -1 COLOUR BASICS: Light color, components of colours. contrast and value principles, pigment colours and light theory, tints and shades color tones ,Key of Colors in primary and secondary colors.

Unit -2 COLOUR IN NATURE: Study of different color combinations with the help of nature.

Unit -3 COLOUR WHEEL: 24 steps color wheel

Unit-4: An in depth study of elements, principles, concepts.

ASSIGNMENTS:

Submit 2 assignments on each of the above topic.

Code: FA17B1.3C

HISTORY OF ART & AESTHITICS

Pre-requisites L S/F P/T/O Total Credits Int. Ext. Total W/S/J/P

Nil 2 T 2 2 50 50 100 W

HISTORY OF ART

Art History - Survey of the western heritage of Art and Architecture. The course introduces to the language of the Arts, Artistic Techniques, the materials, and the creative processes that give rise to the important stylistic developmental look at the art of the past cultures within the context of the social, historical, religious, and political circumstances that produced it. The methodology analyzes stylistic characteristics of each major period as well as the original milieu and function of works of art. Thus, historical context will be equally important as style in our analysis of the visual culture of the western world.

THE STYLISTIC PERIODS ARE:

Unit -1 Primitive Art-: Introduction to Primitive Art, features and influence of Primitivism. Primitive style Paintings and Sculptures are to be discussed

Unit -2 Ancient Greece: A brief introduction on Ancient Greek along with Architecture, Sculptures and Paintings

Unit -3 Ancient Rome: Numerous key concepts of Ancient Rome with reference to Art and Architecture.

Unit -4 The Medieval Art –: Early Christian Art and Byzantine- Rise of Christianity and significant changes in representation of images are to be discussed.

Romanesque and Gothic-: Significant stylistic changes in both periods are to be discussed

Unit -5 The Early Italian Renaissance, the Early Northern Renaissance-: Introduction to Renaissance art with reference to the major artists and artworks.

ASSIGNMENT:

- Identify important works of art from the major stylistic periods of the western world (emphasis to the Stylistic trends artistic preferences of different cultures across time.
- Major artists & their works that best exemplify particular stylistic period.
- Make connections between different stylistic periods & perceive the various cultural & intellectual influences that determine the particular style & function of works of art in a given time & place.

Code: GN17B1.1A

ENGLISH

Pre-requisites L S/F P/T/O Total Credits Int. Ext. Total W/S/J/P

Nil 2 T 2 2 50 50 100 W

Unit 1 Listening: In this unit you will learn to distinguish the different stages of listening, to listen effectively. Phonology, Stress-marking, Homophones

Unit-2 Terminology (subject-enabled): In this unit, one can learn the vocabulary that is specific the stream/industry (terminology) and the overall usage of a word in syntax (sentence). Commonly confused words

Unit-3 Functional Grammar: In this unit, learning of the importance of parts of speech and other aspects of grammar, learning of syntax formation, phrases & clauses, subject-verb agreement, direct vs indirect speech, active vs passive voice, question tags.

Unit-4 Reading: Reading helps us to discover new things. Books, magazines and even the internet are great learning tools which require the ability to read and understand what is read. In this unit, one can develop to skill of reference: Dictionary, Thesaurus, Encyclopedia, and Book reading.

Code: GN17B1.2A

ENVIRONMENTAL STUDIES

Pre-requisites L S/F P/T/O Total Credits Int. Ext. Total W/S/J/P

Nil 2 T 2 2 50 50 100 W

Unit-1: The Multi disciplinary nature of environmental studies Definition, scope and importance need for public awareness.

Unit -2: NATURAL RESOURCES:

RENEWABLE AND NON-RENEWABLE:

NATURAL RESOURCES AND ASSOCIATED PROBLEMS.

a) **Forest resources:** Use and over-exploitation, deforestation, case studies. Timber extraction, mining, dams and their effects on forests and tribal people.

Water resources: Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dams-benefits and problems.

b) **Mineral resources:** Use and exploitation, environmental effects of extracting and using mineral resources, case studies

c) **Food resources:** World food problems, changes caused by agriculture and overgrazing, effects of modern agriculture, fertilizer-pesticide problems, water logging, salinity, case studies.

e) **Energy resources:** Growing energy needs, renewable and non renewable energy sources, use of alternate energy sources. case studies.

f) **Land resources:** Land as a resource, and degradation, man Induced landslides, soil erosion and desertification.

Role of an individual in conservation of natural resources.

Equitable use of resources for sustainable lifestyles. (8 lectures)

Unit - 3 ECOSYSTEMS

Concept of an ecosystem, Structure and function of an ecosystem, Producers, consumers and decomposers,

Energy flow in the ecosystem, Ecological succession, Food chains, food webs and ecological pyramids.

• Introduction, types, characteristic features, structure and function of the following ecosystem:-

Forest ecosystem

Grassland ecosystem

Desert ecosystem

d) Aquatic ecosystems (ponds, streams, lakes, rivers, oceans, Estuaries)
(6 lectures)

Unit - 4 BIODIVERSITY AND ITS CONSERVATION

• Introduction — Definition: genetic, species and ecosystem diversity.

• Biogeographically classification of India Value of biodiversity: consumptive use, productive use social,ethical, aesthetic and option values. Biodiversity at global, National and local levels,

• Hot-spots of biodiversity.

• Threats to biodiversity : habit loss, poaching of wildlife, man-wildlife conflicts.

• Endangered and endemic species of India. Conservation of biodiversity: In --situ and Ex—situ conservation of biodiversity.

Unit - 5 ENVIRONMENTAL POLLUTION:

Definition and Causes, effects and control measures of: -

• Air pollution

• Water pollution

• Soil pollution

• Marine pollution

• Noise pollution

• Thermal pollution

• Nuclear hazards

Solid waste Management: Causes, effects and control measures of urban and industrial wastes.

• Role of individual in prevention of pollution.

• Pollution case studies.

Disaster management: floods, earthquake,. cyclone and landslides. (8 lectures)

Unit - 6 SOCIAL ISSUES AND THE ENVIRONMENT

- From Unsustainable to Sustainable development Urban problems related to energy
 - Water conservation, rain water harvesting, watershed management
 - Resettlement and rehabilitation of people; its problems and concerns case studies.
 - Environmental ethics : Issues and possible solutions.
 - Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust, case studies.
 - Wasteland reclamation.
 - Consumerism and waste products.
 - Environment protection Act.
 - Air (Prevention and Control of Pollution) Act.
 - Water (Prevention and control of Pollution) Act. Wildlife Protection Act. Forest Conservation Act.
- Issues involved in Enforcement of Environmental legislation. Public awareness. (7 lectures)

Unit - 7 HUMAN POPULATION AND THE ENVIRONMENT

- Population growth , variation among nations. Population explosion — Family Welfare Programme.
- Environment and Human Health.
- Human Rights.
- Value Education.
- HIV/AIDS.
- Women and child welfare.
- Role of information Technology in Environment and Human Health Case studies (6 lectures)

Unit - 8 FIELD WORK

- Visit to a local area to document environmental assets-river / forest / grassland / hill / mountain
- Visit to a local polluted site — Urban / rural / industrial / agricultural
- Study of common plants, insects, birds
- Study of simple ecosystems - pond, river, hill slopes, etc. (Field work Equal to 5 lecture hours)

II Semester

Code: AN17B2.1C

CHARACTER DESIGN

Pre-requisites	L	S/F	P/T/O	Total	Credits	Int.	Ext.	Total	W/S/J/P
Nil	1	7	P	8	8	50	50	100	P

A beginning course for 2D animation character design this course provides students the fundamental skills required to develop character design that is considered appealing as per animation Industry standard leading up to the portfolio. Skills are applied in core areas including traditional and digital generated animation, they learn the importance of construction of the character, rotations and full body gestures, by creating a production model sheets (turnarounds) of drawing in various poses and expressions

Unit-1: BASIC SHAPES FOR CARTOONS

Line of action, headlines, eye line (head rotations), head proportions.

Unit-2: CHARACTER CONSTRUCTION AND DETAIL STUDY

Study of character as per head ratio/ proportions

Reference for nature (trees, birds and animals)

Reference from objects around us (table lamp, pencil, book, house hold- items, vessels..etc)

Unit-3: DEVELOPING OF EXISTING AND EXAGGERATED CHARACTER

By using the existing characters, model sheets, exaggerating the characters / developing a new character modifying relist human features like hand and feet etc., Creating stylized characters

Unit-4: CHARACTER MODEL SHEETS

Model sheet, Line-up of characters

Lip/ Mouth expressions, Gestures and attitude sheets

ASSIGNMENT:

1. Create 5 Characters based on above based units mentioned above
2. Create 3 stylized characters – 2 & 4 legged

Code: AN17B2.2C

PRINCIPLES OF ANIMATION

Pre-requisites	L	S/F	P/T/O	Total	Credits	Int.	Ext.	Total	W/S/J/P
Nil	1	7	P	8	8	50	50	100	P

Intended to develop the skills necessary to implement and bring life to the drawings through the principles of animation. To explore the effect of volume, weight, inertia, gravity, air and material through step by step exercises designed to simplify the figure into a variety of narrative situations.

Unit-1: BASIC ANIMATION PRINCIPLES

Concepts of 12 animation principles & their importance.

Unit-2: KEY DRAWING AND ASSISTANCE ANIMATION

From story boarding to poses (layout staging), In-betweens and Cleanups

Unit-3: LINE OF ACTING, PATH OF ACTION, SLOW IN/SLOW OUT, ANTICIPATION, ARC, STRETCH AND SQUASH

Pendulum action, Hand action throwing a ball, cannon ball, rubber ball, balloon, ball rolling on a ramp/ flat floor. Action before a main action, follow an arc to

make a smooth pleasing motion on an action, to create feeling of weight in a character.

Unit-4: FOLLOW THROUGH AND OVERLAPPING ACTION, WAVE ACTION AND APPEAL

To give action to all the flexible and loosely wavy objects, rhythm of animation is through wave action, cuteness is based on the basic proportion of a character.

ASSIGNMENTS: Draw key drawing with in-betweens for the given assignments using the appropriate principles.

Code: AN17B2.3C

STORY BOARDING

Pre-requisites	L	S/F	P/T/O	Total	Credits	Int.	Ext.	Total	W/S/J/P
Nil	1	5	P	6	6	50	50	100	P

An introduction to pre-production planning. A storyboard is a further definition of the script. The focus will be on learning to communicate the drama of the movements and special effects through effective design and pacing. The panels are laid out in order according to the script to give a visual and linear explanation of the story. Storyboards are useful for planning camera angles (framing a shot), position of characters, lighting, etc.

Unit -1: CREATING THE VISUAL STORY: composed of consecutive story sketch panels that depict the action and staging of the script. The storyboard is the basic game plan, the vision of continuity that will drive the entire production. Storyboarding involves working from a film script to set a story down in picture or illustration form. The storyboard functions as the blueprint of an animated picture.

Unit -2: A SEQUENCE: consists of a series of Scene which follow a particular event from beginning to conclusion. In live action, a sequence is generally termed a scene, while what we call a scene is a shot.

Unit -3: CREATING FINAL STORYBOARD: along with the refined characters and with full technical details.

ASSIGNMENT: Any three assignments unit wise.

Code: AN17B2.4C

SCRIPT WRITING

Pre-requisites	L	S/F	P/T/O	Total	Credits	Int.	Ext.	Total	W/S/J/P
Nil	2		T	2	2	50	50	100	W

Script writing involves creating an outline of all of the events taking place in an animation scenario. This means detailing all the audio such as dialogue, sound effects and music score. It also details all of the visual events or features appearing or taking place throughout such as fades, transitions from one scene to another, characters appearing, descriptions of the landscape etc.

Unit -1: CONCEIVING

- Story planning & producing for media production

Unit -2: DEVELOP REALISTIC CRITIQUING SKILLS

- Concepts & techniques need for animation scripting
- Evaluating & creating emotional connection with the audience
- Skills for their own visual stories

Unit -3: DEVELOP, RECOGNIZABLE VERBAL LANGUAGE

- Study of narrative story telling
- Dialogue
- Point of view
- Character development

Unit -4: TALES OF HEROES (LEGEND & RELIGIOUS)

- Infuse story & develop emotional connection
- Writing scene by scene
- Joseph Canbell ‘Hero’s Journey ‘

ASSIGNMENT: Prepare a mini story with script & dialogue for a dramatic presentation.

Code: AN17B2.5C

HISTORY OF ANIMATION

Pre-requisites	L	S/F	P/T/O	Total	Credits	Int.	Ext.	Total	W/S/J/P
Nil	2		T	2	2	50	50	100	W

History of animation a survey of the Heritage of Art & Architecture the methodology to analyze the language of the creative process and the principles of design, as well as techniques and materials. Examining the major monuments and artwork in a chronological sequence, focusing on those from each period, which give the essence of their time, place, function, intent, and the aspirations of the culture and artist, In short, historical context will be equally as important as style.

Unit-1: INTRODUCTION TO ANIMATION

TYPES OF ANIMATION

- Clay animation, Traditional animation, 3Danimation, Puppet/ toy animation, material animation. Why animation?
- To get rewarding careers in Entertainment Media, Feature Film, Television Episodes, Gaming , Web Animation , Ad agencies, E-Learning (Education)

Unit-2: HISTORY OF ANIMATION

DRAWING IN TIME – HISTORY

- History of early man / cave man. Ancient Animation
- In Egypt, Greek – Wheel of Life, kricher’s magic lantern, Flip book Invention of Animation
- Blackton - Human faces & Funny faces, Mc.Cay-“Gertie the Dinosaur”- Disney’ “Steamboat Wille”

Unit-3: ANIMATION STANDARDS

DEFINITION

- Film theory – Definition
- Frame rate, NTSE / PAL/Film speed/Conversion & calculation as per scene.
- Visual transition Devices
- Cut, Fade In /Fade out Cross Dissolve, Wipe

Unit-4: AUDIO- VISUAL SESSION

History of Walt Disney studios and in depth study of its characters. Study of International and Indian animation films. Animation Movie show which should include making of the movie

ASSIGNMENT

- Collect data on each type of animation
- Ex: Name/Title, Director, Style, Country.
- Create a Zoetrope of your own
- Create a flip book/Cardboard disc

Code: GN17B2.6A

COMMUNICATION SKILLS

Pre-requisites	L	S/F	P/T/O	Total	Credits	Int.	Ext.	Total	W/S/J/P
Nil	2		T	2	2	50	0	50	S

Unit-1: Speaking: In this unit, learning of the importance of oral communication, ways to improve one’s spoken English, the presentation techniques, the ability to debate, how to participate in group discussions, how to make public speeches, how to develop dialogues, and how to face interviews.

Unit-2: Vocabulary building: In this unit, one can learn the importance of vocabulary in day-to-day activities by learning idioms, proverbs, collocation, foreign vocabulary influence in English, numbers in English, one-word substitutes, - nyms, affixes, phrasal verbs, abbreviations vs acronyms.

Unit-3: Writing: In this unit, one can learn Skills of different aspects of writing such as paragraph writing, creative writing, report writing, Review writing, essay writing, precise writing.

Unit-4: Business communication: The advent of the computer, and the internet, the importance of art of letter writing has changed completely. In this unit, one learns how to letter write, email, resume writing, fax, punctuation and capitalization.

Proposed & Recommended Text Books:

1. Communication Skills for Technical Students – T M Farhathullah
2. Essential English – E. Suresh, P. Sreehari, J. Savithri

Code: GN17B2.7A

VALUE EDUCATION

Pre-requisites	L	S/F	P/T/O	Total	Credits	Int.	Ext.	Total	W/S/J/P
Nil	2		T	2	2	50	-	50	W

Course Overview: To provide guiding principles and tools for the development of the whole person, recognizing that the Individual is comprised of Physical, Intellectual, Emotional and Spiritual dimensions.

Knowledge Transfer /Expected Skills:

- To help individuals think about and reflect on different values.
- To deepen understanding, motivation and responsibility with regard to making personal and social choices and the practical implications in relation to themselves and others, the community and the world at large
- To inspire individuals to choose their own personal, social, moral and spiritual values and be aware of practical methods for developing and deepening them.

Unit-1: Value Education—Introduction – Definition of values – Why values? – Need for Inculcation of values – Object of Value Education – Sources of Values – Types of Values: i) Personal values ii) Social values iii) Professional values iv) Moral and spiritual values) Behavioral (common) values

Unit-2: Personal values – Definition of person – Self confidence – Relative and absolute confidence, being self-determined, swatantrata (loosely equivalent to freedom). Self discipline – Self Assessment – Self restraint –Self motivation – Determination – Ambition – Contentment. Self-respect and respect to others; expression of respect

Unit-3: Social values – Units of Society - Individual, family, different groups – Community – Social consciousness – Equality and Brotherhood – Dialogue – Tolerance – Sharing – Honesty-Responsibility – Cooperation; Freedom – Repentance and Magnanimity.

Peer Pressure – Ragging - examples - making one’s own choices

Unit-4: Professional values – Definition – Competence – Confidence – Devotion to duty –Efficiency – Accountability.

– Respect for learning /learned – Willingness to learn-Open and balanced mind – Team spirit – Professional. Ethics – Willingness for Discussion; Difference between understanding and assuming

Time Management: Issues of planning, as well as concentration (and aligning with self goals). Expectations from yourself. Excellence and competition, coping with stress, Identifying one’s interests as well as strengths.

Unit-5: Behavioral values – Individual values and group values. Anger: Investigation of reasons, watching one’s own anger; Understanding anger as: a sign of power or helplessness, distinction between response and reaction. Right utilization of physical facilities. Determining one’s needs, needs of the self and of the body, cycle of nature. Relationship with teachers. Inside the class, and outside the class, interacting with teachers.

Unit-6: Complimentary nature of skills and values. Distinction between information & knowledge. Goals: Short term goals and long term goals; How to set goals; How to handle responsibilities which have to be fulfilled while working for goals.

Reference Books:

1. Ramancharla Pradeep Kumar. Compiled Reading Material IIIT - Hyderabad
2. Dr. S. Ignacimuthu S. J., Values for life, Better yourself Books, Bandra Mumbai-600 050 (1999).
3. Values (Collection of Essays)., Published by : Sri Ramakrishna Math., Chennai—4.,(1996)
4. Prof. R.P.Dhokalia., Eternal Human Values NCRT –Campus Sri Aurobindo Marg., New Delhi
5. Swami Vivekananda., Education., Sri Ramakrishna Math., Chennai-4(1957)
6. Holy Books of all religions

III Semester

Code: AN17B3.1C

LAYOUT DESIGN

Pre-requisites	L	S/F	P/T/O	Total	Credits	Int.	Ext.	Total	W/S/J/P
AN17B1.1C	1	5	P	6	6	50	50	100	P

Layout is the art of background for animation. Designs are executed in pencil on punched animation paper of various sizes with light box, depending on the requirements of the scene. Is to determine how to construct the scene technically for the camera in order to capture the intentions of the story sketch (as per storyboard)

Unit-1: STUDY OF PERSPECTIVE:

Design, understanding the character animation, effect animation, inking and background painting, they must also have the ability to draw a wide variety of subject matter in many different styles.

Unit-2: SHADOW PERSPECTIVE:

Render the rough layout, defining lines and shapes and gradations and shading to create dimension. Character registration lines are generally indicated with red pencil. While the rest of the drawing is in black pencil.

Unit-3: PERSPECTIVE: How can we best give the illusion that the characters are in a three – Dimensional environment than a flat drawing.

Unit-4 : INTRODUCTION TO LAYER SEPARATION IN LAYOUTS:

Layouts intro, pencil shadings for layouts perspective study of character as per layouts. Indoor/Outdoor and various styles of layouts. Layer separation – UL, OL, held cell.

SETTING/ STAGGING:

Create a living world for the characters, and what props and elements would best fit the world (Scene/Shot).

ASSIGNMENT:

1. Create a perspective view of any object with a 3 point perspective.
2. Create a layout showing with a shadow in perspective from a given scene according to the requirement of the story board.
3. Prepare three types of elements & effects from either wood, sand, soil, glass, cloth, metal, sky.

Code: AN17B3.2C

DIGITAL BACKGROUND DESIGN

Pre-requisites	L	S/F	P/T/O	Total	Credits	Int.	Ext.	Total	W/S/J/P
Nil	1	5	P	6	6	50	50	100	P

Digital painting and color composition for animation, movies and Gaming with an emphasis on studying the works of old masters. Students will discover the process of how

to reconstruct the picture plane through animated movie studies, industry standard technique of 'Photo bashing'. Course work will cover color theory, perspective, and the use of brushes & textures as per Software (this includes: creating images of environments, props, or vehicles using photo overlays in digital Painting software).

Unit-1: Interface using Digital Paint applications.

Unit-2: Drawing in Silhouette with Digital Pen Tablet, Toning in grayscale, Tones and Values.

Unit-3: Setting of Layers.

Setting back ground as per the pencil layout (storyboard).
Environment Painting, Concept art.

Unit-4: Rendering in Light and Shadow.

Creating the mood of environments, Day and Night light.
Outdoor and Indoor lighting.

ASSIGNMENT: Draw and paint digitally an environment (Forest, Space ships, Fantasy world). Prepare collections up to 20 illustrations.

Code: AN17B3.3C

ACTING FOR ANIMATION

Pre-requisites	L	S/F	P/T/O	Total	Credits	Int.	Ext.	Total	W/S/J/P
Nil	2	4	P	6	6	50	50	100	J

Enable students to understand the need for acting, to make the characters perform on screen. Encourage to understand the difference between role play and action. Students will be exposed to observe the body language, attitude in performance, emotions etc.,

Unit-1: STUDY OF ACTION SEQUENCES: Study of some of the key sequences in feature and animated movies by observing them repeatedly. Analyzing and understanding the character style, behavior, body language, body dynamics, anticipation, follow-through and weight shifts.

Unit-2: ACT AND OBSERVE: Working with short takes not less than 30 seconds. Preparing the characters in terms of their mannerisms, emotions, and character traits. Acting and recording some of the action sequences, including drama, comedy by critical observation.

Unit-3: CHANGE THE ACTION INTO PERFORMANCE: Develop the rhythm in action. Understand the tense and relax situations, drama, comedy, attitude and emotions.

Unit-4: PERFORMING A SCENE: Study the scene, rehearse and enact with the scene partners under the supervision of a director in front of the audience.

ASSIGNMENT: Workshop based assessment.

Code: AN17B3.4C

EFFECTS ANIMATION – COMPOSITING

Pre-requisites	L	S/F	P/T/O	Total	Credits	Int.	Ext.	Total	W/S/J/P
Nil	1	5	P	6	6	50	50	100	P

Unit-1: Classical animation, Special effects, Highlight and shadows.

Unit-2: Element - Liquid

Splash Water, Rain, tap water, water falls, Ocean wave.etc

Unit-3: Element - Fire and smoke

Lighting a fire-torch, Match stick

Explosion, smoke and dust.

Unit-4: Element – Air, Magic spill and Wind.

ASSIGNMENT: 5 different elements, FX animation.

ELECTIVE - 1

Code: AN17B 3.1E

CONCEPTUAL ART

Pre-requisites	L	S/F	P/T/O	Total	Credits	Int.	Ext.	Total	W/S/J/P
Nil	1	2	P	3	3	50	50	100	P

Conceptual Art, the idea behind a particular work produced is more important than the finished art work.

Unit -1: Create an effective visual solution for character and background scene

- Fantasy characters
- Mythological characters

Unit -2: Design characters for historical, stylized, realistic creatures, robots which includes costumes, weapons and accessories

Unit -3: Environments/ settings, Interior and exterior, Using appropriate perspective.

Unit -4: Point of view, mood, camera angles, gestures and facial expressions

ASSIGNMENT: Five assignments covering from all the above topics / Units.

Or

Code: AN17B 3.2E

DYNAMIC FIGURE DRAWING

Pre-requisites	L	S/F	P/T/O	Total	Credits	Int.	Ext.	Total	W/S/J/P
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Nil 1 2 P 3 3 50 50 100 P

Dynamic drawing of a human figure based on observation of organic relationship, gesture action, motion and rhythm. Basic anatomy is the focus, while exploring different elements of the human body and their relation.

Unit-1: Block Shapes for Easy Posing and Perspective

Muscle Tone, Proportions, Balance, Posture and Gesture
Differences between Male and Female.

Unit-2: Measuring and proportion

Basic Structure balance, Line Weights, Weight shift
Muscle Tone and Proportions.

Units-3: Force drawing

Drawing with scale and proportion of Human and animal anatomy.

Unit-4: Rapid sketching: Quick action drawing for animation approach.

Submit the final project along with the resume (portfolio) on storage devices.

IV Semester

Code: AN17B4.1C

CHARACTER ANIMATION

Pre-requisites	L	S/F	P/T/O	Total	Credits	Int.	Ext.	Total	W/S/J/P
AN17B3.3C	1	5	P	6	6	50	50	100	P

The process of creating the key poses and animation blocks in order to complete the scene or shot without “in-betweens and breakdowns”, Demonstrate the essence of an animated action so as to make the drawing complete to show the sequence ie Sequential drawing.

Unit-1: Creating straight ahead & pose to pose animation for biped characters.
Creating straight ahead & pose to pose animation for quadruped characters.

Unit-2: Creating straight ahead & pose to pose animation for octopod characters.
Creating a single character animation in flip book animation.

Unit-3: The secondary action such as the movement of hair or cloth etc.

Unit-4: Dope sheet, exposé sheet / x-sheet.

ASSIGNMENT: Any three assignments covering the above mentioned topics.

Code: AN17B4.2C

2D - DIGITAL COMPOSITING

Pre-requisites	L	S/F	P/T/O	Total	Credits	Int.	Ext.	Total	W/S/J/P
Nil	1	5	P	6	6	50	50	100	P

Assemble different elements and backgrounds into single frame / sequence to see the animation as intended for the final audience.

Unit-1: Introduction to 2D digital animation software's.

Unit-2: VECTOR ANIMATION

X-sheet creation, scanning, vectorising.

Unit-3: SIGNIFICANCE OF COLOUR IN ANIMATION

Creating color models: ink paint and palette creation.

Unit-4: ANIMATION SEQUENCE

Scene planning, EFX, resolution setting, aspect ratio, field of view and playback.

ASSIGNMENT: Four assignments covering the above mentioned topics.

Code: AN17B4.3C

DIGITAL PHOTOGRAPHY

Pre-requisites	L	S/F	P/T/O	Total	Credits	Int.	Ext.	Total	W/S/J/P
Nil	1	5	P	6	6	50	50	100	P

Unit-1: BASICS OF PHOTOGRAPHY

Camera and its parts, controls and equipment required for shooting.

Unit-2: LIGHTING

Study of key light, fill light, back ground light and Hair/Rim light etc.

Unit-3: COLOUR, SHADE and SHADOWS

Lighting and color importance. Study of day and night light. Utilization of natural and artificial lights. Soft and hard shadows.

Unit-4: STOP MOTION

Stop motion techniques and equipment required for shooting. Transforming or editing a photograph using various methods and techniques to achieve desired results using digital applications/software.

Code: AN17B4.4C

PORTFOLIO-2D

Pre-requisites	L	S/F	P/T/O	Total	Credits	Int.	Ext.	Total	W/S/J/P
Nil	1	5	O	6	6	50	50	100	J

Analyze the work produced during the first two years of their program. Do a case study on the current industry standards and create a portfolio using the skills and strength acquired in the last two years as per the current standards of the industry.

ASSIGNMENT:

Each student has to complete at least 5 scenes from concept to final compositing from utilizing the knowledge gained from the past semesters.

ELECTIVE – 2

Code: AN17B4.1E

COMIC ART

Pre-requisites	L	S/F	P/T/O	Total	Credits	Int.	Ext.	Total	W/S/J/P
Nil	1	2	P	3	3	50	50	100	P

Create comics or graphic novels for print and digital delivery, using traditional or digital imaging techniques. The comic book design should demonstrate the process of script writing, character design, layout design, inking and colouring of a comic.

Unit -1: Drawing from inspiration and life.

Go over various tools for illustrating comic and cartoons.

Create thumbnails and gesture drawings.

Unit -2: Define the human form.

Using shapes

Posing characters

Foreshortening

Draw a few body builds in different poses.

Unit-3: Convey hero and villains.

Costume design with different equipment.

Unit -4: Create A page layout for comics or a few different compositions for fantasy illustration. Draw character at various angles.

OR

Code: AN17B4.2E

ILLUSTRATION

Pre-requisites	L	S/F	P/T/O	Total	Credits	Int.	Ext.	Total	W/S/J/P
Nil	1	2	P	3	3	50	50	100	P

This program is designed to the real-world scenarios and explore career in the art and design. Students create portfolio-ready work through the use of traditional materials (charcoal, watercolor, pastel, etc.) in combination with technology (computers, digital cameras and scanner, electronic drawing tablets) using industry-recognized software. ***The program culminates with a professional-ready, physical, 'hard copy' portfolio and a web presence.***

Unit-1:

Introduction to Illustration
Types of Illustration
Step by step process of Illustration

Unit-2:

- Books illustration
- Fashion illustration
- Illustrations for Advertising and Web

Unit-3: Advanced illustration

- Product Illustration
- Industrial Illustration

ASSIGNMENTS:

Presentation of individual work
Presentation Hard copy/ Softcopy of Portfolio ready

V Semester

Code: AN17B5.1C

3D PROPS & SETS MODELING

Pre-requisites	L	S/F	P/T/O	Total	Credits	Int.	Ext.	Total	W/S/J/P
Nil	1	5	P	6	6	50	50	100	P

Focuses on using 3d software to build sets and props. Digital modeling concepts required to develop their own 3d scenes/environment. Modeling interior and exterior sets based on a designed layout using reference.

Unit -1: INTRODUCTION TO NURBS MODELING: Create a simple props using

NURBS primitive objects, NURBS curves, attaching and detaching curves, NURBS components, Editing NURBS surfaces.

Unit -2: CREATING NURBS SURFACES: Create organic environments using revolving, lofting and extruding curves to create surfaces, attaching and detaching surfaces, socking, stitching surfaces.

Unit -3: POLYGON MODELING: Create props using polygon primitive objects, polygon components, editing polygon surfaces, combining and separating polygons. Create vehicles using polygon modeling.

Unit -4: UV LAYOUT: Unwrapping the polygon models

ASSIGNMENT: Design one set with minimum of three props and one environment.

Code: AN17B5.2C

3D CHARACTER MODELING

Pre-requisites	L	S/F	P/T/O	Total	Credits	Int.	Ext.	Total	W/S/J/P
AN17B2.1C	1	5	P	6	6	50	50	100	P

Digital modeling with emphasis on organic and inorganic characters Use reference images to build characters based on character designs. Encouraged to build cartoony, fantasy, alien, realistic human and animal characters.

Unit-1: LOW POLY CHARACTER MODELING

Polygon based character with emphasis on the poly count to achieve the desired detail using normal mapping.

Unit-2: HIGH POLY CHARACTER MODELING

Model a 3D character in line with character anatomy, volume and proportion, surface subdivision and mesh smooth.

Unit-3: FACIAL MODELING

Using various deformers and modifiers to add expressions on the characters.

Unit-4: REFINING THE TOPOLOGY

Maintain the proper flow of edges, mesh, resolution, cleaning up character models, and understanding surface normals.

Note: Visit a facility to understand the workflow of 3D scanning and 3D printing.

Code: AN17B5.3C

TEXTURING

Pre-requisites	L	S/F	P/T/O	Total	Credits	Int.	Ext.	Total	W/S/J/P
FA17B1.2C	1	5	P	6	6	50	50	100	P

Focuses on creating textures and shaders. Study the surface features of the various objects and create texture maps accordingly. This section includes the workflow in texturing the characters, props and environments.

Unit -1: SHADERS AND MATERIALS: Understanding shader attributes, Creating shading networks, connecting nodes in work area, using 2d and 3d texture nodes, applying maps to various material attributes like transparency maps, bump maps etc.,

Unit -2: UV MAPPING TECHNIQUES: Understanding UV's, editing UV's and using mapping projections on polygon surfaces, planer mapping, cylindrical mapping, spherical mapping, automatic mapping, working with UV texture editor window.

Unit -3: CREATING AND PAINTING TEXTURES: Painting texture maps, 3d painting, creating PSD networks, Paint Effects, painting diffuse maps, bump maps, specular maps and reflection maps.

Unit -4: CHARACTER SHADING: Develop character shading using concepts of translucence subsurface, opacity, light scattering and hard surface reflections.

ASSIGNMENT: Assignment submitted under Character Modeling to be Textured.

Code: AN17B5.4C

RIGGING

Pre-requisites	L	S/F	P/T/O	Total	Credits	Int.	Ext.	Total	W/S/J/P
Nil	1	5	P	6	6	50	50	100	P

Focus on creating character setups. Create skeleton and attach them to character meshes, to create animation friendly rigs as per the character animation requirements.

Unit -1: CONSTRAINS

Parenting and grouping objects, hierarchy, using point, orient, creating controllers, set driven keys etc.

Unit -2: CREATING SKELETONS

Create joints, editing joints, parenting joints, orienting joints, creating hierarchical structures and skeletons for biped and quadruped characters.

Unit -3: KINEMATICS

Understanding forward kinematics and inverse kinematics, Using IK solvers on skeletons, blend FK and IK, creating controllers and adding custom attributes, creating facial setups, blend shape deformers.

Unit -4: SKINNING

Understanding rigid and smooth binding, painting skin weights, editing skin weights using component editor, mirroring skin weights, adding influence objects and muscles as per the character's anatomy.

ELECTIVE - 3

Code: AN17B5.1E

ADVANCED CHARACTER ANIMATION

Pre-requisites	L	S/F	P/T/O	Total	Credits	Int.	Ext.	Total	W/S/J/P
Nil	1	2	T	3	3	50	50	100	P

Key Frame Animation (Light box - Computer with web camera)

Key frame animation is a technique that works a little like storyboarding (a comic strip series of images illustrating a sequence of events). It enables us to choreograph and build an animation by arranging objects and taking snapshots of them at key moments during a sequence of movement or change. These key moments or key frames become the fixed points in time through which the animation passes. Animation between these key frames is calculated by the application.

Unit -1: Storyboarding to Extreme Key Poses (Layout Staging), in between, breakdowns, clean-ups, Layers, Registration, Time chart Exposer sheet and Lip-sync.

Unit -2: Character Poses with strong gestures with line of action. Action movement with path of action.

Unit -3: Body Mechanics, Character Action, Principles involved in animation with Volume and weight, characterization, run, jump walk push pull etc.,

Unit -4: Action Analysis, In-betweening techniques, cleanup techniques, time grid, registration, trace back, breakdown drawings, line quality, line consistency etc.,

ASSIGNMENT:

Movements using birds in flight and animal in motion.

5 actions with a single character.

OR

Code: AN17B5.2E

ADVANCED MODELING

Pre-requisites	L	S/F	P/T/O	Total	Credits	Int.	Ext.	Total	W/S/J/P
Nil	1	2	T	3	3	50	50	100	P

Focus on tradition sculpting techniques using various modeling material. Traditional sculpts used to improve visualization while modeling 3d characters. Traditional sculpting helps in understanding the anatomy, proportions, volume and depth of the model.

Unit -1: TYPES OF MATERIAL

Use of plasticine, polymer, POP, other non-hardening plastic clay, wax, various types of water based clay etc.,

Unit -2: TOOLS USED FOR CLAY MODELLING

Tools like cutter, scraper, curver, ribbon cutter etc. made of polished hardwood, wire end modeling tools, metal etc.,

Unit -3: MODELLING CHARACTERS WITH CLAY

Understanding proportions, maintaining scale proportions while modeling miniature prototypes, finishing touches, painting models with different types of paints.

Unit -4: 3D SCANNING

3D scanning of the models or sculptures using digital scanning applications.

VI Semester

Code: AN17B6.1C

LIGHTING

Pre-requisites	L	S/F	P/T/O	Total	Credits	Int.	Ext.	Total	W/S/J/P
FA17B1.2C	1	6	P	7	7	50	50	100	P

Understanding light properties, shadow properties and visual impact of lighting on CG objects. Observe and study real world lighting and simulate the same with CG environment.

Unit -1: CREATING LIGHTS : Create various types of lights, light properties, understanding light attributes, direct and indirect lighting, using maps on light attributes, break light links, make light links.

Unit -2: WORKING WITH SHADOWS : Understand visual functions of shadow, shadow algorithms, depth-map shadow, ray traced shadow, soft shadows, hard shadows,

faking shadows etc.,

Unit -3: CHARACTER LIGHTING : 3-point lighting, key light, fill light, rim light and back light. Creating character mood, using light and colour theory.

Unit -4: ENVIRONMENT LIGHTING: Illuminate scenes in day/night lighting adding environment elements like fog, smoke, light glow and diffuse lighting.

Code: AN17B6.2C

3D CHARACTER ANIMATION

Pre-requisites	L	S/F	P/T/O	Total	Credits	Int.	Ext.	Total	W/S/J/P
AN17B4.1C	1	6	P	7	7	50	50	100	P

Focus on developing skills necessary to bring life to characters using principles of animation. Explore the effect of volume, weight, inertia, gravity through step by step exercises.

Unit -1: INTRODUCTION to 3D ANIMATION TECHNIQUES

Using a simple prop like a bouncing ball, demonstrate weight and timing by learning animation tools, motion path animation, ghosting, play blasting, setting key frames, copying and pasting key frames, Graph editor, tangents, dope sheet, playback speed.

Unit -2 : ANIMATING CHARACTERS

Using a simple biped character create poses and silhouette to demonstrate principals of animation like weight, line of action, Create simple walk and running cycles to demonstrate timing, squash- stretch and characterization.

Unit -3 : BODY MECHANICS

Animating small actions to familiarize body weight, volume, gravity etc., lifting heavy objects, pushing and pulling objects, character interaction with objects

ASSIGNMENT: 10 sec submission of any animated character.

Code: AN17B6.3C

ROTO PREP

Pre-requisites	L	S/F	P/T/O	Total	Credits	Int.	Ext.	Total	W/S/J/P
Nil	1	4	P	5	5	50	50	100	P

Unit 1: History and principles of Rotoscoping.

Unit 2: Techniques of rotoscopy using application software. Articulate and split the subject into multiple shapes

Unit 3: Creating roto for complex scenes and elements like motion blurred characters, hair etc.,

Unit 4: Concepts of rotoscopy for stereoscopic conversion (2D to 3D)

Reference Software's: Nuke, Mocha, Silhouette

Code: AN17B6.4C

3D CAMERA TECHNIQUES AND RENDERING

Pre-requisites	L	S/F	P/T/O	Total	Credits	Int.	Ext.	Total	W/S/J/P
Nil	1	4	P	5	5	50	50	100	P

Based on the knowledge gained regarding live action cameras and light setup replicate the cameras in the virtual 3D layout application. Learning rendering techniques to give the final output as per the industry required formats and resolutions.

Unit -1: CAMERA LAYOUT

Principles of videography, long shot, medium shot, close-up shot, extreme close-up shot, establishing shot, rule of thirds and camera speeds (frame rates).

Unit -2: CAMERA ATTRIBUTES

Introduction to cameras, camera attributes, camera tools, pan camera, dolly camera, truck camera, depth of field and motion blur in a 3D application.

Unit -3: RENDERING CONCEPTS

Understanding global illuminations, GI photons, photon maps, final gathering, combining GI and FG, HDRI images, caustics, sub surfaces, scattering, creating physical sun and sky.

Unit -4: RENDERING IN LAYERS

Rendering a scene in different layers and passes as per the requirement for the final compositing.

ELECTIVE - 4

Code: AN17B6.1E

3D VIRTUAL ANIMATION

Pre-requisites	L	S/F	P/T/O	Total	Credits	Int.	Ext.	Total	W/S/J/P
Nil		3	P	3	3	50	50	100	P

Understanding of virtual reality concepts using AR and VR applications and equipment for animation.

Unit -1: Introduction to concepts of AR and VR.

Unit -2: Developing simple a AR - VR content using existing application software.

Unit -3: Creating VR camera rigs stitching of imagery using existing application software.

OR

Code: AN17B6.2E

DIGITAL SCULPTING

Pre-requisites	L	S/F	P/T/O	Total	Credits	Int.	Ext.	Total	W/S/J/P
Nil		3	P	3	3	50	50	100	P

Horned skills in creating digital sculptures in 3D application software based on the principles of sculpting.

Unit -1: Introduction to sculpting applications and tool sets.

Unit -2: Create digital sculptures of characters and props

Unit -3: Painting and projecting the textures. Import and export normal maps and displacement maps to 3D animation applications

VII Semester

Code: AN17B7.1C

DYNAMICS

Pre-requisites	L	S/F	P/T/O	Total	Credits	Int.	Ext.	Total	W/S/J/P
AN17B5.1C	1	5	P	6	6	50	50	100	P

Learning the concepts of secondary animation like cloth and hair dynamics. Replicating physical elements like fire, water, smoke and destruction.

Unit -1: EFFECTS USING PARTICLE SYSTEMS

Understanding particles, emitters, particle goals, creating smoke, fire, explosion effects using particle effects, instancing particles, crowd simulation

Unit -2: RIGID AND SOFT BODY DYNAMICS

Understanding rigid bodies, active rigid body, passive rigid body, rigid body solver, applying forces on rigid bodies, breaking rigid bodies, creating effects using soft bodies.

Unit -3: FLUID EFFECTS

Creating clouds, water, oceans, ponds using fluid effects

Unit -4: NPARTICLES, NCLOTH, NHAIR.

Code: AN17B7.2C

VFX COMPOSITING

Pre-requisites	L	S/F	P/T/O	Total	Credits	Int.	Ext.	Total	W/S/J/P
AN17B6.3C	2	4	P	6	6	50	50	100	P

Unit -1: CONCEPTS OF 3D COMPOSITING

Introduction to image layers, 3D render passes, depth of field and blending.

Unit -2: KEYING

Green/blue matt removal, green spill and color separation.

Unit -3: COLOUR CORRECTION

Colour grades and vignettes, compositing in node based software

Unit -4: TRACKING & STABILISING

Concepts of 2D Tracking for 3D, perspective matching, Nodal plane shot, focal length shot.

Code: AN17B7.3C

3D FACIAL ANIMATION

Pre-requisites	L	S/F	P/T/O	Total	Credits	Int.	Ext.	Total	W/S/J/P
AN17B6.2C	1	4	P	5	5	50	50	100	P

Focus on creating realistic and natural expressions and emotions. To learn the important mouth shapes used during dialogues and sync them with audio.

Unit -1: ANATOMY OF FACE

Studying anatomy of the face, understanding how muscles work together to create expressions and emotions.

Unit -2: BLENDER SHAPES AND DEFORMERS

Creating blend shapes and deformers as per the emotion and dialogue.

Unit -3: CREATING FACIAL EXPRESSIONS

Creating all important emotions like happy, sad, shocked, smiling, crying, laughing etc., Eye brow movements, eye blinks, head turn etc.,

Unit -4: IMPORTING SOUND AND LIP SYNCHING

Importing supported audio files into the timeline, using X-sheets, Synchronize expressions and mouth shapes to the audio.

ASSIGNMENT: 10 clips of synchronization of facial expression with sound.

Code: AN17B7.4C

SEMINAR ON ANIMATION & VFX

Pre-requisites	L	S/F	P/T/O	Total	Credits	Int.	Ext.	Total	W/S/J/P
Nil	2	3	0	5	5	50	50	100	J

Select a topic pertaining to animation / VFX and collect relevant data and give a presentation with audio and video reference not less than 20 minutes of duration.

Code: AN17B7.5C

VIDEO SHOOTING & EDITING

Pre-requisites	L	S/F	P/T/O	Total	Credits	Int.	Ext.	Total	W/S/J/P
Nil	1	4	P	5	5	50	50	100	P

Learn techniques of video shooting, editing and audio syncing for post production process. Correction, sound mixing.

Unit -1: SHOOTING VIDEO FOOTAGE

Shoot a video for relevant topic including green screen / chroma key shot.

Unit -2 : VIDEO EDITING and TIME CODING

Assembling the video footage in timeline using a non linear application.

Unit-3: ADDING DIGITAL ELEMENTS

Importing and integrating any digital elements or stock footage.

Unit -4: INTRODUCTION TO SOUND EDITING

Understanding sound editing fundamentals, recording audio.

Unit -5 : FINAL OUTPUT

Colour correction - colour grading. Rendering the final output in desired file format and resolution.

ELECTIVE – 5

Code: AN17B7.1E

CAMERA TRACKING / MATCH MOVE

Pre-requisites	L	S/F	P/T/O	Total	Credits	Int.	Ext.	Total	W/S/J/P
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Nil 1 2 P 3 3 50 50 100 P

Learn to create a virtual camera in a 3D application to match a live action camera, virtual camera will be used as the proxy element to render out all digital assets meant for the scene. Tracking the live action character / props to integrate with the digital assets/animation.

Unit-I: 2D TRACK POINTS

Preparing the video footage for tracking and match moving – Auto tracking and manual tracking - Usage of track one, two, and four - Creating 2D Tracks.

Unit-II: MATCHING THE PERSPECTIVE

Create a virtual set as per the live action scene. Matching the perspective as per the background image.

Unit-III: SOLVING THE CAMERA

Using the 2D track point data and the perspective match to the background solving the camera using any 3D tracking application

Unit-IV: MATCH MOVE / ROTO MATION

After the virtual camera is created, match moving any characters or props required to be integrated with any digital assets for animation.

OR

Code: AN17B7.2E

PAINT FINALIZING

Pre-requisites	L	S/F	P/T/O	Total	Credits	Int.	Ext.	Total	W/S/J/P
Nil	1	2	P	3	3	50	50	100	P

Based on the raw footage certain elements need to be removed, replicated or enhanced to match the background to achieve the required final output.

Unit-1: Techniques and tools for paint used in the digital applications.

Unit-2: Rig and wire removal by classical layer based tools

Unit-3: Rig and wire removal by node based tools

Unit-4: Stereo paint work flow for stereo scopic conversion (from 2D to 3D)

VIII Semester

Code: AN17B8.1C

INTERNSHIP & PRACTICAL TRAINING

Pre-requisites	L	S/F	P/T/O	Total	Credits	Int.	Ext.	Total	W/S/J/P
Nil	-	8	O	8	8	50	50	100	J

Students have to undergo practical training for a period of 12 weeks in any of the reputed animation studios anywhere in India of their own choice. The student has to submit a brief report of the training undergone duly attested by the facilitator to the department for the assessment. The final evaluation is done through viva voce.

Code: AN17B8.2C

DISSERTATION

Pre-requisites	L	S/F	P/T/O	Total	Credits	Int.	Ext.	Total	W/S/J/P
Nil	-	7	O	7	7	100	100	200	J

The student need to do a detailed study on the topic selected under the guidance of a guide/supervisor. He/she need to do a proper analysis and submit a detailed report in the standard format of the university/college. The final submission of the thesis should be his/her own contribution and should give a declaration accordingly. The thesis must have clear objectives, methodology and conclusion with necessary reference bibliography.

Code: AN17B8.3C

FINAL PROJECT

Pre-requisites	L	S/F	P/T/O	Total	Credits	Int.	Ext.	Total	W/S/J/P
Nil	-	15	O	15	15	100	200	300	J

Preparing a final project on the Traditional / 3D / VFX animation on a chosen subject with guidance of a concerned faculty. Each student must execute and submit individual projects in particular a subject elective area. The duration of the final project should be not less than 60 seconds of duration. For every student a guide will be allotted by the co-ordinator/head of the department.

Note: No group / team work shall not be assessed.