



DEPARTMENT OF DESIGN
Delhi Technological University

Academic Programme

Master of Design

ORDINANCES & REGULATIONS

ACADEMIC PROGRAMME

ACADEMIC PROGRAMME
MASTER OF DESIGN
ORDINANCES & REGULATIONS



Department of Design

DELHI TECHNOLOGICAL UNIVERSITY

(Estd. by Govt. of NCT of Delhi vide Act 6 of 2009)

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SECTION-A

About University

**Initially Established with the name “Delhi Polytechnic”
In the year 1941 at Kashmere Gate Campus**

**In the year 1965 renamed as
Delhi College of Engineering
Reconstituted
Delhi Technological University in the year 2009**

Vide Govt. of NCT of Delhi Act 6 of 2009

**-A non-affiliating
Technological University**

**“Committed to
Foster Engineering Excellence
And
Scientism together”**

Delhi Technological University
(Formerly Delhi College of Engineering)
(Estd. by the Government of NCT of Delhi vide Delhi Act 6 of 2009)

"Delhi Technological University is a non-affiliating teaching-cum-research University engaged in fostering excellence in education, research and innovations in engineering and technology, applied sciences and management"

The University is inspired by talent and driven by innovations and is firmly committed to provide industry relevant, socially responsible manpower to meet the challenges of 21st Century. The culture of research and innovations is vibrant in the DTU campus which inspires students from UG levels onwards to engage in cutting edge technology development and discover the value and worth of the knowledge acquired by them during their studies. With its illustrious history spanning over 75 years the institution is marching on the pathways of excellence and is one of the highly sought-after university for the inspired students community and faculty.

Vision

To be a world class university through education, innovation and research for the service of humanity.

Mission

1. To establish centres of excellence in emerging areas of science, engineering, technology, management and allied areas.
2. To foster an ecosystem for incubation, product development, transfer of technology and entrepreneurship.
3. To create environment of collaboration, experimentation, imagination and creativity.
4. To develop human potential with analytical abilities, ethics and integrity.
5. To provide environment friendly, reasonable and sustainable solutions for local & global needs.

"DTU as a Technological University will be a significant milestone to create an academic and research environment to foster scientism and engineering excellence together. The upgradation of DCE as a Tech University is seen as a major initiative of Government of Delhi to make Delhi as the Knowledge Capital of India."

The Inspiration

The inspiration for reconstituting Delhi College of Engineering into a Technological University in the NCT of Delhi has been derived from the fact that in the new Knowledge Age creation and dissemination of knowledge, capabilities of utilizing knowledge to create quantum jump in quality, performance and service to industry and society and thus, creating a better tomorrow has to be the hallmark of science, engineering and technology education in India. Such an effort when encapsulated with the agile layers of scientific values, unclenching faith in research integrity and professional morality ensures growth, prosperity and happiness around the world. Such an academic environment, in fact, needs to be created in the temples of higher learning, especially in the University and Institutions imparting professional education. This necessitates the requisite academic and administrative autonomy. The autonomy here becomes the freedom to excel and the associated accountability ensures a much greater commitment and compliance to high academic standards. In the context of Technological University and Engineering Institutions, we need also to cause seamless integration of science and engineering so that we succeed in creating the power of science and the might of technology together in our institutional campuses.

Learning from the international experience it goes without saying that we need to establish future Universities in India where science and technology both could flourish together, adding strength to each other's existence and contributing to the growth of interdisciplinary engineering in an environment of scientism.

What we really need to do is to create institutions and academic environment which attracts the very best talent towards science & engineering education and research both in the student community as well as in the faculty. For this we need to create the synergy between science and engineering to ensure that the very best talent is drawn towards university campuses which gravitate with the excitement of science and the thrill and joy of engineering. The DTU is firmly committed to foster this vital synergy between science and engineering.

The National Capital for many decades has been the hub for quality education and research in its premier institutions and universities such as the IIT Delhi, AIIMS, Delhi University colleges including Delhi Technological University. Delhi for a long time has been also known for promotion of manufacturing and production activities in both medium and small scale sectors. It has witnessed during the last two decades a significant growth of IT and ITES industries in and around Delhi. This has caused a major shift in the emphasis on shifting the hard core engineering activity to soft sectors

of the knowledge economy. We could have caused a much greater resurgence of the core engineering sector if along with human resource development, we could have undertaken technology incubation and product innovation in our institutions of higher learning. DTU as a teaching-cum-research university offers a unique opportunity to create an environment of synergetic partnership between academic and industry. DTU thus, aims to cause a major departure from the conventional system of education and research. It aspires to imbibe a culture of scientific research in its technology disciplines and technology temper it its scientific research and education. The university also aspires to provide the thrill of a corporate R&D environment with a planned focus on industrially relevant projects and technology incubation.

The human resource output of DTU shall impact the growth of future engineering and technology. It will revolutionize the basis of design, systems of manufacturing and give rise to development of new materials, next generation communication technologies, information highways and cyber networks, growth of clean energy and environment technologies and capabilities to manage technology, business and enterprises in the connected economy. In fact, the output of DTU is target to impact significantly the resurgence of the 3rd Industrial Revolution which is on the anvil given the convergence of IT and the fast-developing opportunities for harnessing energy in plenty through renewable energy resources.

The research outputs of this university are of high value to India's socio-economic development and for the progress in industrially relevant science and technology. Strong linkages have been forged between teaching and research, university and industry, and university and research laboratories. Collaborative projects with industry and research institute are also a major focus area of the University.

The DTU is engaged in fostering a culture of excellence supported by qualified faculty and high-quality student intake, including international students admitted through the NRI/ PIO/ Foreign Nationals quota. It has the necessary freedom and supportive layers of autonomy to nurture excellence in teaching and research. DTU is envisioned to be a pioneering institute having high productivity of quality scientific and technological human resource and brainware. We wish to benefit Industry in India from the quality of our graduate out turn and cost-effective technology incubation and innovative product development. The DTU has focused its academic and research strategy on creating the *Panchamrit* of Academia, Industries, R&D organization, Government and Society, thus enhancing its reach as well as its share of contribution to national economy and playing its role as a partner in progress of the society.

Our Glorious Past:

"76 years of Tradition of excellence in Engineering & Technology Education, Research and Innovations" Delhi College of Engineering, (initially established with the name – Delhi Polytechnic) came into existence in the year 1941 to cater the needs of Indian industries for trained technical manpower with practical experience and sound theoretical knowledge. The institution started its functioning at the historic Kashmere Gate campus as a follow up of the Wood and Abott Committee of 1938. It comprised of a multi-disciplinary and multi-level institution offering wide ranging programmes in engineering, technology, art and sculpture, architecture, pharmacy and commerce. The national diploma awarded by the institution was recognized as equivalent to degree level for the purpose of employment. In 1952, the college was affiliated with University of Delhi and started formal Degree level programmes. The department of Architecture later became the School of Planning and Architecture, now a Deemed University and Institution of National importance. The department of Arts and Sculpture became College of Arts and the departments of Chemical Technology and Textile Technology were shifted out en-block to mark beginning of the IIT Delhi at its new campus at Hauz Khas. The department of commerce was later abolished and the faculty of management studies of the University of Delhi was established by Prof. A Das Gupta, of DCE. Delhi College of Engineering is thus the mother institution of a number of national projects including IITD, SPA, College of Arts and even the famous FMS.

Till 1962, the college was under the direct control of Ministry of Education, Government of India. In 1963, the administration of the college was handed over to Delhi Administration. Delhi College of Engineering was under the administrative control of Department of Training & Technical Education, Govt. of NCT of Delhi. For academic purpose, the college was affiliated to University of Delhi since 1952. From July 2009, the DCE has become Delhi Technological University vide Delhi Act 6 of 2009.

The erstwhile DCE has functioned from its historic Kashmere Gate Campus for almost 55 years and has shifted in 1996 to its lush green sprawling campus of 164 Acres at Bawana Road, adjoining Sector-17, Rohini, Delhi. Its shifting to new campus has added the dimension of research and caused innovations in plenty, which has received high national and international acclaim. As a Delhi Technological University it has the desired autonomy to excel and shape itself as a world class Technological University.

About Department of Design:

Strategic role of design through innovation in enhancing national and industrial competitiveness is universally recognized and underpins the national policy of Govt. of India. The strategy to achieve this vision seeks spot light on strengthening quality design education and usages of design in different sectors.

In furtherance of this national design vision, Delhi Technological University had decided to provide facilities for excellent design education, research and training to suit the needs of the society.

Department of Design is envisioned to pursue excellence in design thinking, design scholarship and design practice for the betterment of society in a holistic manner.

Design is viewed as a driver of innovation and is recognized as key differentiator for providing competitive edge to products and services. It involves an integrated humanistic approach to design products, it involves an integrated humanistic approach to design products, services and systems. It seeks to delve deeper in understanding of technological, Commercial and societal context in conception,

Developments and delivery of innovative products and services as well as tools, techniques and methods required in the practice of design suitable to environment.

Vision:

To pursue excellence in design thinking, design scholarship and design practice for the betterment of humanity and planet earth.

Mission:

The Mission of the department is as follows:

- To develop centres of excellence in service design, interactive design, product design, visual communication and allied areas
- To attract and nurture quality faculty with empathy having a passion for growth of self and others.
- To attract energetic, innovative students and enable them to emerge as creative and caring design professionals
- To create facilities for incubation, product development, transfer of technology and entrepreneurship.
- To provide course and facilities for other than design department student and faculty for developing inter- disciplinary activities and projects.

SECTION-B

Ordinance (1-B)

Ordinance for the Master of Design Programme of Delhi Technological University

Disclaimer : This is a representation of Ordinances and Regulations approval by Academic Council, DTU. For any variation, the document approved by Academic Council shall be applicable.

DELHI TECHNOLOGICAL UNIVERSITY

Ordinance (1-B)

Ordinance for the Master of Design Programme of Delhi Technological University

Preamble

Delhi Technological University (DTU) is a non-affiliating, teaching and research University at Delhi to achieve excellence in science, engineering, technology, management and allied areas and matters connected therewith or incidental thereto. It enables students to face the wide-ranging changes taking place in the fields of technology, environment and management with confidence. This includes undertaking design, development, construction, production, managerial and entrepreneurial activities, and higher studies in their chosen or allied interdisciplinary fields of study. The University lays great emphasis on assisting students in the development of National character, self-confidence, leadership and entrepreneurial skills.

1. Short title and Commencement:

- (i) This ordinance shall be called the Ordinance 1 (B) 2018 meant for the undergraduate and post graduate degree programmes of Delhi Technological University for batches 2018-19 onwards.
- (ii) This ordinance shall come into force with effect from the date of Board of management approval.

2. Definitions: (a) In this ordinance, unless the contents otherwise requires-

- i. **"Applicant"** shall mean an individual who applies for admission to undergraduate/post graduate degree programmes
- ii. **"AC" and "Council"** shall mean the Academic Council of the Delhi Technological University.
- iii. **"Academic Programme"** shall include a programme of courses or any other component leading to undergraduate or post graduate degree.
- iv. **"BoM"** shall mean the Board of Management of the University.

- v. **"BoS"** shall mean Board of Studies of the Department.
- vi. **"CGPA"** shall mean the Cumulative Grade Point Average.
- vii. **"Coordination Committee"** shall mean the committee of the faculty members involved in a course.
- viii. **"COE"** shall mean Controller of Examinations of the University.
- ix. **"Course"** shall mean a curriculum component of the academic programme identified by a designated code number, a title and specific credit assigned to it.
- x. **"Course Coordinator"** shall mean a faculty member who shall have full responsibility for the course; coordinating the work of faculty member(s) involved in that course, including examinations and the award of grades.
- xi. **"CWS"** shall mean Class Work Sessional.
- xii. **"Dean (UG)"** shall mean the Dean Academic (UG).
- xiii. **"Dean (PG)"** shall mean the Dean Academic (PG).
- xiv. **"Degree"** shall mean the Bachelor or Master degree of the University as may be approved by the BoM from time to time.
- xv. **"Department"** shall mean a department of studies of the University
- xvi. **"DSW"** shall mean the Dean of Students Welfare.
- xvii. **"ETE"** shall mean End-Term Examinations
- xviii. **"HOD"** shall mean Head of the Department/School
- xix. **"Faculty Advisor"** shall mean a teacher nominated by the Department to advise a student on the courses to be taken by him/her and other matters related to the academic programme.
- xx. **"Grade Moderation Committee"** shall mean the committee appointed by the Board of Studies to moderate grades awarded by the Course Coordinators in different courses in a semester at a given level of a curriculum.
- xxi. **"MTE"** shall mean Mid-Term Examinations
- xxii. **"NRI NRI/PIO/FN category Student"** shall mean the student who is admitted against NRI/PIO/FN category.
- xxiii.

- xxiv. **“OBC”** shall mean the other backward classes as notified by the Government of India/Government of NCT of Delhi from time to time.
- xxv. **“PD”** shall mean the persons with disability as specified by the Government of India from time to time.
- xxvi. **“PG”** shall mean the Post Graduate.
- xxvii. **“PRE”** shall mean Practical Examinations
- xxviii. **“PRS”** shall mean Practical Sessional
- xxix. **“Registration”** shall mean registration for course or semester at the start of the semester of any programme of the University.
- xxx. **“SC/ST”** shall mean the Scheduled Castes and Scheduled Tribes as notified by the Government of India/Government of NCT of Delhi from time to time.
- xxxi. **“Scheme of Teaching and Examination”** shall mean the scheme of teaching and examination as approved by the Academic council from time to time.
- xxxii. **“School”** shall mean a school of studies of the University.
- xxxiii. **“SGPA”** shall mean the Semester Grade Point Average.
- xxxiv. **“Student”** shall mean a student registered for undergraduate or post graduate programme.
- xxxv. **“UG”** shall mean the Under Graduate.
- xxxvi. **“University”** shall mean the Delhi Technological University.
- xxxvii. **“UTTC”** shall mean University Time Table Committee.

Note: ‘He’, ‘Him’ and ‘His’ implies ‘he/she’, ‘Him / Her’ and ‘his/her’, respectively.

3. Ordinance:

- i. The University shall offer UG and PG programmes as approved by the BoM on the recommendation of the AC either on its own or on the initiative of a Department/ School, and/or on the direction of the BoM.
- ii. The minimum entry qualifications and the policy and procedure of admission to the programmes shall be such as may be approved by the AC.

- iii. A student of a programme shall be required to earn a minimum number of credits through various curricular components like lectures/tutorials/laboratory/studio courses, seminar, industrial training, project etc. at the University or at such other institutions/industry as may be specified in the Regulations.
- iv. A student shall be required to complete all the requirements for the award of the Bachelor or Master degree within such period as may be specified in the Regulations.
- v. A student shall be required normally to attend every lecture, tutorial, studio and laboratory class. However, for late registration, sickness or other such exigencies, absence may be allowed as provided for in the Regulations.
- vi. A student may be granted such scholarship/ studentship/ assistantship/ stipend, etc. and awarded such prizes and medals as may be specified in the Regulations in accordance with the directions of the Government of India/Government of NCT of Delhi and/or the decision of the AC/BoM.
- vii. The procedure for the withdrawal from a programme, rejoining the programme, and all such matters as may be connected with the running of a programme shall be such as may be specified in the Regulations.
- viii. The procedure of conduct of examination, evaluation, the award of grades and the SGPA/CGPA, secrecy, and declaration of result shall be such as may be specified in the Regulations.
- ix. The award of the Bachelor or Master degree to an eligible student shall be made in accordance with the procedure laid down in the Regulations.
- x. The procedure for temporarily suspending or phasing out of a programme, shall be such, as may be laid down in the Regulations.
- xi. Notwithstanding anything contained in the above Ordinance, no Regulations shall be made in contravention of the decision of the AC/BoM in regard to the duration of the programme, the number of studentships, the procedure of admission, the percentage of students of various categories. The Regulations for the undergraduate and post graduate degree programmes can be prepared/ modified / amended from time to time and the same shall be approved by the AC.

- xii. Subject to the provisions of the Act and Statutes and these Ordinances, the issues not covered in these Ordinances or in the event of differences of interpretation, the Vice Chancellor may take a decision, after obtaining the opinion of a Committee consisting of any or all the Deans of the University. The decision of the Vice Chancellor shall be final.
- xiii. In special circumstances, the Vice Chancellor may, on behalf of the BoM, approve amendment, modification, insertion or deletion of an ordinance(s), which in his opinion is necessary or expedient for the smooth running of a programme, provided that all such changes shall be reported to the BoM in its next meeting for ratification.

R. 1(B).3 Board of Studies (BoS):

The Board of Studies (BoS) shall be a sub-committee of the AC, which shall consider all the academic matters related with the Department/School. It shall also consider and recommend to the AC the broad framework and policies related to the UG and PG degree programmes offered by the University. The composition of BoS of the Department(s)/School(s) shall be as follows: Head of the Department/School (Chairperson), all Professors of the Department/School (Members), two Experts appointed by the Vice Chancellor (Members) and two Associate Professors of the Department/School by rotation (Members) for a period of two years. In the absence of adequate faculty in the Department/School, Vice Chancellor can constitute the BoS with faculty from other relevant disciplines.

R. 1(B).4 Undergraduate Programme:

- (i) The scheme of teaching and examination of the programme is given in **Section - C** respectively. The scheme of teaching and examination of a programme may be amended/ modified in accordance with the approval of the AC.
- (ii) The normal and maximum duration of the Bachelor of Design programme is given in **Table 1**. The maximum duration of the programme shall be counted from the date of initial registration. The maximum duration of the programme shall include the period of withdrawal, absence and different kinds of leaves permissible to a student, but it shall exclude the period of rustication. The duration for these programmes may be altered in accordance with the decision of the AC/ BoM.

Table 1: Duration of Bachelor of Design Programme

S. No	Programme	Normal Duration	Maximum Duration
1.	M. Des.	2 years	4 years

R. 1(B).5 Admissions:

- (i) The policy of admissions, the eligibility thereof, admission criteria and other issues pertaining to admission shall be such as may be approved by AC from time to time.
- (ii) NRI/PIO/Foreign national either residing in India or abroad may be admitted to the UG and PG programmes in accordance with the policy guidelines laid down by the AC from time to time.

R. 1(B).6 Starting a New Programme:

- (i) The University may start a new UG or PG programme as approved by the BoM on the recommendation of the AC either on its own or on the initiative of a Department/School, and/or on the direction of the BoM.

R. 1(B).7 Semester System:

- (i) The academic programmes in the University shall be based on semester system; Odd and Even semesters in a year with winter and summer vacations.
- (ii) A number of courses shall be offered in each semester. Each course shall have a certain number of credits assigned to it depending upon the academic load of the course assessed on the basis of weekly/semester contact hours of lecture, tutorial, studio and laboratory classes, assignments or field study or self-study.
- (iii) The courses offered in a semester shall be continuously assessed and evaluated to judge the performance of a student.

R. 1(B).8 Course Code:

Each course offered by the University shall be identified by a course code, normally consisting of a string of five alpha-numeric characters followed by a course title. The first two characters in a course code shall be capital letters identifying the responsible Academic Department/School offering the course. The next three characters are numerical digits: the first one normally specified the year of study and the last two digits specify the course number and the semester in which the course shall be offered. Normally odd number in the course code will indicate that the course will be offered in the odd-semester and the even number will indicate that the course will be offered in the even-semester of the year.

R. 1(B).9 Course Credits:

Each course shall have an integer number of credits, which reflects its weight. The number of credits of a course in a semester shall ordinarily be calculated as under:

- (i) **Lectures/Tutorial:** One lecture hour per week shall normally be assigned one credit. One hour of tutorial per week shall be assigned one credit. However, the credits may be adjusted further by taking into consideration the quantum of work required to be put in by a student for learning the course having two/three hours of contact every alternate week shall have one credit only.
- (ii) **Practical and Design Studio:** One laboratory or Design Studio hour per week shall normally be assigned half a credit. The courses having two/three hours of contact every alternate week shall have one credit only.

R. 1(B).10 Academic Registration:

- (i) Every student shall be required to register in each semester on the scheduled date as per academic calendar of the University till the completion of the degree. If the student does not register on scheduled date he/she has to pay late registration fee notified from time to time upto a maximum of 10 working days. Registration in absentia may be permitted by the Dean (UG)/ Dean (PG). In absentia registration may be allowed only in rare cases such as illness or any other contingencies, at the discretion of the Dean (UG)/ Dean (PG).

- (ii) In case, a student is proceeding on industrial training/internship, late registration may be allowed only up to a maximum of 10 working days after the scheduled registration date without late registration fee by the Dean (UG)/ Dean (PG).

R. 1(B).11 Course Registration:

- (i) Every student shall be required to register for the courses that he/she wants to study for earning credits and his/her name will appear in the roll list of each of these courses. No credit shall be given if a student attended a course of which he or she has not registered. The performance of a student in all the courses, for which he/she has registered, shall be included in his/her grade card(s).
- (ii) Student should first register for the courses in which he/she has been declared failed in the previous year/semester and then register for the remaining courses of the semester to make up the total required credits for that semester. However, a student of a programme of more than 2 years duration shall not be allowed to register for the courses offered to students of third year, if he/she has not cleared all the courses of first year and a student of a programme of more than 3 years duration shall not be allowed to register for the courses offered to students of fourth year, if he/she has not cleared all the courses of second year.
- (iii) All students of UG/PG programme shall complete the registration procedure on a specified registration date as per academic calendar/ schedule notified from time to time.
- (iv) A student is advised to register the courses as specified in the scheme of teaching and examination of the programme in each semester. In case the student is not allowed to register the courses of current semester due to backlog of course(s) of previous year(s), he/she may register for credits less than minimum credits depending on number of backlogs of course(s) of previous year(s). However, a student can register for a minimum and a maximum of credits as given in **Table 3**.

Table 3: Minimum and Maximum Permissible Credits

S. No	Programme	Minimum Credits	Maximum Credits
1.	M.Des.	16	32

- (v) A student shall have the option to add or delete courses from his/her registration during the first ten days of the semester as per Academic Calendar.

R. 1(B).12 Minimum Number of Students Required for An Elective Course:

An elective course in the department/school shall run if a minimum of 20 numbers of students register for it in a semester. However, the minimum number of students shall be decided as per guidelines laid by BoS for programmes where the strength of batch of students is below 30.

R. 1(B).13 Programme Advisor:

A Programme Advisor shall be appointed by the Head of the Department who shall advise the students for registration.

R. 1(B).14 Course Coordinator:

Every course offered by a Department/School shall be coordinated by a Course Coordinator appointed by the Head of the Department/School. The Course Coordinator shall have full responsibility for the course. He/she shall coordinate the work of other faculty members involved in that course in respect of their participation in various activities related to the course including continuous evaluation of the students through tests, quizzes, assignments, mid-term and end-term examination and the award of the grades.

R. 1(B).15 Course Evaluation:

- (i) A student shall be evaluated for his/her academic performance in a course through tutorials, practicals, design studio work, homework, assignments, term papers, field work/industrial training, seminars, quizzes as CWS and STS, MTE, ETE and STE as specified in the Scheme of teaching and examination.
- (ii) The distribution of weights for each component shall be announced by the course Coordinator at the beginning of the course, subject to such stipulations as are given in the Scheme of Teaching and Examination for a given programme.
- (iii) The courses offered in a semester shall be continuously assessed and evaluated to judge the performance of a student.

- (iv) The criteria for continuous evaluation of any subject shall be declared in the very first week of commencement of the classes.
- (iv) Answer sheets of the test(s) and examination(s) cannot be written in pencil.
- (v) Evaluation of Answer sheet(s) should not be in pencil.
- (vi) A student can see his/her answer sheet(s) of MTE and the ETE and point out any discrepancy in its evaluation on a day fixed by the Course Coordinator/Chairman, Grade Moderation Committee. Objections will be entertained right then, and not even on the next day.
- (vii) The answer sheets be disposed off by the Examination Branch after preserving them for six months only, except those which have some pending matter.
- (viii) The answer sheets of the End-Term Examination shall not be shown to a student after finalization of the grades by the Grade Moderation Committee.
- (ix) The industrial/field training shall normally be evaluated through the quality of work carried out, the report submission and presentation(s) as specified by the Mid-Department/School from time to time. The project shall be evaluated normally by Mid-Term seminar(s), quality of work carried out, project report submitted and the viva-voce examination.

R. 1(B).16 Conduction of Examination:

- (i) The examinations of various programmes shall be conducted in a manner as prescribed and approved by AC.
- (ii) Mid-Term Examination will be conducted by course coordinator and the faculty members concern during the slot notified by the COE.
- (iii) While the paper is set, the Mid-Term Examination papers will not have any alternative, however 20-30% alternatives may be admissible in the End-Term Examination paper.
- (iv) The End-Term Examination will be conducted by the COE.
- (v) Evaluation process should be concluded within specified days from the end of the schedule of examination:
 - Mid-Term Examination – One week
 - End-Term Examination – Two weeks

- (vi) A notification of slot/date/venue be issued by concerned faculty member under intimation to COE for showing answer sheets to the students. Both Mid-Term & End-Term answer sheets should be shown to the students by the concerned faculty member(s)/Evaluator(s).
- (viii) Policy adopted by individual faculty member/ evaluator for evaluation of answer sheets should be uniform and consistent, and in case any moderation is done for the marks the same should uniformly be applied under intimation to COE.

R. 1(B).17 Grading System:

- (i) The academic performance of a student shall be graded on a 10-point scale. For the award of grades in a course, all component-wise evaluation shall be done in marks. The marks of different components shall be reduced to relative weights of each component as per Scheme of teaching and examination and shall be added. Marks so obtained shall be out of 100 and the same shall be converted to grades.
- (ii) The mean (\bar{x}) and the standard deviation (σ) of marks obtained of all the students in a course shall be calculated and used to convert the marks obtained(m) by a student into grades. The structure of grading will be as given in **Table 4**.

Table 4: Structure for Grading of Academic Performance

Letter grade	Numerical grade	Formula	Computation of grade cut off
O (Outstanding)	10	$m \geq \bar{x} + 1.5 \sigma$	The value of $\bar{x} + 1.5\sigma$ to be taken into account for grade computation. The grade cut off will be $\bar{x} + 1.5\sigma$ or 91% whichever is lower
A+ (Excellent)	9	$\bar{x} + 1.0 \sigma \leq m < \bar{x} + 1.5 \sigma$	The value of $\bar{x} + 1.0\sigma$ to be taken into account for grade computation. The grade cut off will be $\bar{x} + 1.0\sigma$ or 82% whichever is lower
A (Very Good)	8	$\bar{x} + 0.5 \sigma \leq m < \bar{x} + 1.0 \sigma$	The value of $\bar{x} + 0.5\sigma$ to be taken into account for grade computation. The grade cut off will be $\bar{x} + 0.5\sigma$ or 73% whichever is lower

B+ (Good)	7	$\bar{x} + 0.0 \sigma \leq m < \bar{x} + 0.5 \sigma$	The value of $\bar{x} + 0.0\sigma$ to be taken into account for grade computation. The grade cut off will be $\bar{x} + 0.0\sigma$ or 64% whichever is lower
B (Above average)	6	$\bar{x} - 0.5 \sigma \leq m < \bar{x} + 0.0 \sigma$	The value of $\bar{x} - 0.5\sigma$ to be taken into account for grade computation. The grade cut off will be $\bar{x} - 0.5\sigma$ or 55% whichever is lower
C (Average)	5	$\bar{x} - 1.0 \sigma \leq m < \bar{x} - 0.5 \sigma$	The value of $\bar{x} - 1.0\sigma$ to be taken into account for grade computation. The grade cut off will be $\bar{x} - 1.0\sigma$ or 46% whichever is lower
P (Pass)	4	$\bar{x} - 1.5\sigma \leq m < \bar{x} - 1.0 \sigma$	The value of $\bar{x} - 1.5\sigma$ to be taken into account for grade computation. The grade cut off will be $\bar{x} - 1.5\sigma$ or 35% whichever is lower
F (Fail)	0	$m < \bar{x} - 1.5 \sigma$	Less than $\bar{x} - 1.5\sigma$ or 35% whichever is lower

In those subjects, where the total number of students is upto 30, the results in Grades shall be prepared on the basis of the actual performance of the student in the percentage scale and not on the basis of the formula approved for computation of grades.

(iv) The following are the general guidelines for the award of grades:

- (a) All evaluations of different components of a course shall be done in marks for each student. The marks of various components shall be reduced to approve weights as given in Scheme of teaching and examination and added up to get total marks secured on a 100-Point scale. The rounding off shall be done only once and on the higher side.
- (b) The method suggested in Table 4 shall be used for the award of grades with or without marginal adjustment for natural cut- offs.
- (c) The provisional grades shall be awarded by the Coordination Committee of the course consisting of all the teachers involved in that course. The course coordinator

shall have full responsibility for this purpose. The grades so awarded shall be moderated by grade moderation committee of the respective Department/School.

(d) For a student to get passing grade, he / she will have to appear in End-Term Examination.

(v) The award of 'F' Grade

(a) The 'F' grades denote poor performance, i.e. failing course. 'F' grade is also awarded in case of poor attendance (see attendance Rules). 'F' grade secured in any course stays permanently on the grade card. The weight of 'F' grade is not counted in the calculation of the CGPA however, it is counted in the calculation of the SGPA.

(b) In case a student is awarded 'F' Grade in a Core paper, the student has to repeat the course in the subsequent semester, when it is offered.

(c) In case a student is awarded 'F' grade in an Elective paper, the student may take the same course or any other course from the same category in the subsequent semester.

(d) In case a student is awarded a failing grade in the major / minor project, he/she shall have to repeat the course in the form of a new project. Such a student will have to work full time on the project for a minimum period of four months.

(vi) The award of 'I' grade

This refers to an 'incomplete' grade which is required to be converted into a regular letter grade. The guidelines for the award of 'I' grade is as follows:

a) If a student is absent during End-Term Examination of a course due to medical reasons or other special circumstances, he / she may apply for the award of 'I' grade to the COE through the Course Coordinator, provided that he / she has not been disqualified due to shortage of attendance. The concerned course coordinator shall have to be convinced about the extraordinary circumstances and shall have to certify the attendance record before this rarely used option to award 'I' grade is recommended.

- b) The 'I' grade so awarded shall be notified by the COE.
- c) The 'I' grade shall be converted into a proper letter grade and shall be sent to the COE after make-up examination is over and the requirements of the course are completed by the student.
- d) In extra ordinary circumstances, the period of conversion of 'I' grade may be extended to the next semester, with the approval of the Dean (UG)/Dean (PG) on his own or on the recommendation of the Course Coordinator and the Head of the Department(s)/School(s).
- e) In extra-ordinary circumstances, on the recommendation of the Dean (UG)/ Dean (PG), the Vice-Chancellor may order the award of 'I' grade to a student/class or a batch of students taking a particular course. The conversion of 'I' grade into a regular grade or any other action shall be as per the approval of the Vice-Chancellor.
- (vii) The letter grades awarded to a student in all the courses shall be converted into a semester and cumulative performance index called the Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA), to be calculated as given below:

$$S.G.P.A = \frac{\sum_{i=1}^n C_i \times P_i}{\sum_{i=1}^n C_i}$$

Where,

C_i = Number of Credits of the i^{th} course of a semester for which SGPA is to be calculated

P_i = Grade Point obtained in i^{th} course.

$i = 1, \dots, n$, represent the number of course in which a student is registered in the concerned semester.

$$\text{C.G.P.A.} = \frac{\sum_{i=1}^n C_i \times P_i}{\sum_{i=1}^m C_i}$$

Where,

C_i = Number of Credits of the i th course of a semester.

P_i = Grade Point obtained in i th course. A grade lower than 'P' (i.e. grade point < 4) in a course shall not be taken into account.

$i = 1, \dots, m$, represent the number of courses in which a student was registered and obtained a grade not lower than 'P' upto that semester for which CGPA is to be calculated.

- (viii) At the end of the programme, a student with CGPA of 8.5 and above shall be awarded 'First Division with Distinction' and a student with CGPA between 6.75 and 8.5 shall be awarded "First Division".
- (ix) All the passing out students of a class shall be given ranks as "**Rank XXX in a class of YYY Students**".

R. 1(B).18 Grade Moderation Committee:

- (i) The BoS of academic department(s)/School(s) will constitute the Grade Moderation Committee for all the Academic Courses under its purview. The Head of the Department/School shall be the Chairman of the committee, and other members shall consist of two Professors, two Associate Professors and two Assistant Professors of the department. This committee shall be responsible for adherence to the guidelines for the award of grades and shall include all the concerned Course Coordinators. The Chairman, Grade Moderation Committee shall be responsible for the display of grades in the department and for forwarding the final grades to the COE. The Chairman, Grade Moderation Committees shall also send the record-copies of the marks and the grades along with the statistical parameters for all the courses moderated to the COE. One copy of distribution of marks shall be sent to the COE along with grades by the Chairman, Grade Moderation Committee. The general guidelines for the moderation of grades are as follows:

- a) The date of moderation shall be made a part of the Academic Calendar of the University.
- b) Two-tier moderation be adopted, both for the subject and for the Semester (SGPA, CGPA), Minor adjustment shall be possible during moderation, particularly in the marginal cases. The Chairman, Grade moderation committee shall invariably retain a copy of the grades sent to Examination Section so that CGPAs may be calculated without having to make a reference to the Examination Section for this purpose.
- c) All concerned faculty members should invariably be present for the moderation committee meeting. In case a faculty member is going out on University duty, he/she shall hand over his/her inputs for moderation with a colleague, who shall present it, in the meeting.

R. 1(B).19 Scrutiny of Grades, Tabulation and Declaration of Results:

- (i) A student may apply for scrutiny of grades to the Head of the Department/School, within three days from the date of display of grades. The Grade Moderation Committee and the Course Coordinator may check the entry of the weights from different components of evaluation and their addition. The results of scrutiny may lead to either a change in grade due to mistake(s) in any of the aspects scrutinized by the committee or the grade may remain unchanged. The results will be intimated to the COE within three days from the date of receiving the application in the department/school as per academic calendar.
- (ii) In exceptional circumstances the grade(s) of a student or a number of students may be scrutinized by a committee constituted by the VC.
- (iii) The COE shall organize the tabulation of grades and declaration of results. COE shall be the custodian of records related to examinations and results.

R. 1(B).20 Earned Minimum Credits and Minimum CGPA for the Degree:

- (i) The credits for the courses in which a student has obtained 'P' (minimum passing grade for a course) grade or higher shall be counted as Credit Earned by him/her. A student, who has earned the required number of credits as specified in the curriculum he/she is registered for, is eligible for the award of the respective degree.

R. 1(B).21 Unfair Means

In case a student is found adopting or suspected of adopting unfair means before, during or after the examination, or lifting or copying of work(s) of someone else and inserting it in his class work submissions, Project, Dissertation etc. without proper acknowledgement, credit and reference, such penal action shall be taken by the University against the student as may be necessary and adequate to uphold the sanctity and integrity of the examination system and the credibility of the University.

All the cases regarding use of unfair means practices in the examinations shall be reported and placed before the "Unfair Means Scrutiny Committee". The composition of the Unfair Means Scrutiny Committee shall be as follows: Dean (UG) (Chairperson), Dean(PG), DSW, Head of the concerned Department/School, Associate Dean/DR Academic (UG), Associate Dean/DR Academic (PG) (Members) and COE (Convener).

The COE shall convene the meeting of Unfair Means Scrutiny Committee from time to time as per requirement.

R. 1(B).22 Attendance, Absence, Leave and Withdrawals:

- (i) All the students of UG/ PG programmes are expected to attend every lecture, tutorial, practical or design studio class scheduled for them.
- (ii) The students of UG/ PG programme must have a minimum attendance of 75% of the total number of classes including lectures, tutorials and practicals, held in a subject in order to be eligible to appear at the End-Term Examination for that subject.
- (iii) The Dean (UG)/ Dean (PG), authorized by the Vice Chancellor for this purpose may relax the minimum attendance upto 10% for reasons to be recorded. This relaxation may be granted on production of documents showing that the student was either busy in the authorized activities or suffering from any disease. The student should submit these documents to the Dean (UG)/ Dean (PG) through Chairman, BoS within seven days of resuming the studies.
- (iv) Under exceptional circumstances, the Vice Chancellor may further relax the minimum attendance upto 5%.
- (v) Attendance of the students shall be monitored and displayed during a semester as per the guidelines issued by the Dean (UG)/ Dean (PG).

R. 1 (B).23 Make-up Examinations on Medical / Extra Ordinary Ground:

Students who have missed the Mid-Term Examinations and/or End-Term Examinations of a course(s) due to medical reasons or other special circumstance may be considered for a Make-up Examination on the clear cut recommendations of HOD considering the merit of the case. In case of End-Term Examinations Make-up Examinations will be allowed only if a student has not been disqualified earlier, due to shortage of attendance. The student shall make an application to the HOD, within ten working days from the date of the examination missed, explaining the reasons for his/her absence. Applications received after this period will not be entertained. The HOD shall forward all applications with his/her recommendations to COE who in turn shall seek approval from Dean (UG)/ Dean (PG). Further, there will be no make-up of the Make-up Examinations.

R. 1 (B).24 Withdrawal

(a) Withdrawal from Course

A student who wants to withdraw from a course shall apply through the HOD to the COE within one week from the end of the Mid-Term Examination under the advice of his/her Programme Advisor. If his/her request for withdrawal is granted, it will be recorded in the registration record of the student and the concerned Course Coordinator will be informed about it. The student will be awarded a withdrawal grade at the end of the semester.

(b) Semester Withdrawal:

In case a student is unable to attend classes for more than four weeks in a semester he/she may apply to the COE through HOD, for withdrawal from the semester, which shall mean withdrawal from all the registered courses in the semester. However, such application shall be made under the advice of the Programme Advisor, as early as possible and latest before the start of the End-Term Examination. Partial withdrawal from the semester shall not be allowed.

R. 1(B).25 Termination of Enrolment:

(i) Due to Absence:

If a student registered in the first year of the programme is continuously absent from the classes for more than four weeks without informing the Course Coordinators, the Coordinator shall immediately bring it to the notice of HOD of the concerned department/school for informing the COE. The names of such students shall be removed from the University rolls and such absence during first year will render the student ineligible for re-admission.

(ii) On Academic Grounds:

a) The enrolment of a student in a programme shall stand terminated if he/she fails to earn 30% of prescribed credits in first year, as specified in the Scheme of teaching and examinations, at the end of first year.

b) The enrolment of a student shall stand cancelled on completion of maximum duration from the date of initial registration in the programme.

b) A student whose enrolment has been terminated may appeal to the Vice Chancellor for reconsideration within fifteen days from the date of issuance of the communication of termination. If the appeal is allowed, his/her registration and enrolment shall be restored.

R. 1(B).26 Scholarship, Prizes, Medals and Merit Certificate:

- (i) The University shall award the merit-cum-means (MCM) scholarships, University free studentship, SC/ST category University scholarship and other scholarships, award and prizes to the student of UG programmes as may be approved by the AC/BoM. Other scholarships may be awarded by the University from the grant from individuals, trusts, organizations and the Governments with a view to provide financial assistance to needy students under the terms and conditions specified by the University. Announcements on these scholarships stating eligibility and the value of scholarships etc. shall be made by the University while inviting applications from time to time.

- (ii) Those students, who have been punished for unfair means during MTE or ETE or in Seminars/ project/ etc. or for serious act of indiscipline shall not be awarded Merit-cum-Means Scholarship and other trust scholarship or Medals, Prizes and awards for that academic session only.
- (iii) Student may draw scholarships from outside sources only if permitted by Dean (UG)/ Dean (PG).

R. 1(B).27 Phasing out of a Programme:

The phasing out of a programme may be considered by the AC on the recommendation of the BoS. Also, a programme may be phased out by the AC if, consecutively for three years, the number of students registering for the programme is less than 40% of the sanctioned intake of the students.

R. 1(B).28 Interpretation of Regulations:

In case of any dispute, difference of opinion in interpretation of these Regulations or any other matter not covered in these Regulations, the decision of the Chairman, AC shall be final and binding.

R. 1(B).29 Emergent Cases:

Notwithstanding anything contained in the above Regulations, the Chairman of the AC may, in emergent situation, take such action including insertion, suspension or modification of any Regulation(s) on behalf of the AC as he/she deems appropriate and report it to the next meeting of the AC for its approval.

Instruction for Penalty for Use of Unfair Means

1. The main instruction for the conduct of a student in the examination hall shall be printed on the cover page of the answer sheets. Any contravention of these instructions and the use any unfair means will render the student liable for punishment.
2. As soon as student is suspected by the invigilator having resorted to unfair means, his/her answer-book shall be seized. The paper etc. duly signed by the invigilator found in possession of the student shall be attached with answer-book in his/her present. The student shall then be asked to complete part II of the prescribed form and sign it. This form shall than be endorsed by the Invigilator.
3. After completing all the above formalities, a fresh answer-book shall be given to the student for completing the examination.
4. After a particular examination is over, these answer-books (duly marked I, II) shall or delivered separately to the COE together with the report form duly completed in all respects.
5. All the cases reported in the category of unfair means shall be forwarded to the unfair means scrutiny committee which will inquire into them and submit its recommendation after laying down clearly the nature of the offence listed below to the Vice-Chancellor for consideration and necessary orders.
6. The action as given in table may be taken for different categories of offense under these Regulations.

Penalty for use of Unfair Means

Category	Nature of Act	Punishment To Be Imposed
I	<ul style="list-style-type: none">• Found talking to another student during the examination hours.• Found talking to a person outside the examination hall.• Changing seat in the examination hall without permission.• Committing any breach of any direction given to the student.• Attempt to influence the examiner by an appeal in the answer-book.• Writing either the questions or solutions thereof on the question paper.	Warning with undertaking by the Student that S/he will not repeat such act during entire duration of the programme.

<p style="text-align: center;">II</p>	<ul style="list-style-type: none"> • Possession of cell phone or any other item of such type of communication in examination hall. • Intentionally tearing off the Answer Book/a part thereof or a continuation sheet. • Misbehaving with the Superintendent / Invigilator/staff on duty or with any other candidate in or around the Examination Centre before, during or after the examination. • Leaving the examination room without the permission or without handing over the answer book or without signing the attendance sheet. • Found in possession of any written or Xerox notes or any printed materials or notes written on any part of the body/clothing or instruments or electronic device etc. or having notes written on University Furniture or drawing board or cover of the calculator etc which could be helpful to him/her in answering the paper or could be helpful to another candidate in that Examination Hall. • Using abusive or obscene language in the answer book. • Copying or copied from any paper, book or note written on any part of his/her clothing or body or Furniture or instruments or Mobile phone or any other Electronic gadgets etc. • Consulting notes or books while being outside the examination hall during examination hours. • Allowed any other candidate to copy from his/her answer-book. 	<p>Mid Term Examination The Examination of the concerned paper to be cancelled and to be awarded ZERO marks in the concerned paper.</p> <p>End Term Examination The Examination of the concerned paper to be cancelled and to be awarded 'F' grade.</p> <p>The student shall be allowed to reregister for the cancelled paper in next academic year only.</p>
<p style="text-align: center;">III</p>	<ul style="list-style-type: none"> • Smuggling in an answer -book or part of it, taking out or arranging to send out an answer-book or part of it. • Communicating or attempting to communicate directly or through someone else with the examiner or anybody connected with the University examination for influencing them regarding the award of marks. • Replacing his / her answer book or any page or continuation sheet with any other unauthorized book, page or continuation sheet during the course of examination. • Found in possession of an answer- book of some other student 	<p>Mid Term Examination All the papers of the Mid Term Exam to be cancelled and to be awarded ZERO marks in all the papers.</p> <p>End Term Examination All the papers of the End Term Exam to be cancelled and to be awarded 'F' grade in all the papers & shall</p>

	<ul style="list-style-type: none"> • On being challenged /searched by the Superintendent, Invigilator or a staff on duty, swallows a note/ paper or runs with it or is guilty of causing disappearance or destroying any such material possessed by him/her. • Guilty of Writing deliberately another students' roll no. in his/her answer book. 	re-register for all papers in next academic year only.
IV	<ul style="list-style-type: none"> • Gross misbehaviour i.e. threatening with physical force to Superintendent, the Invigilator/ staff on duty working at the Examination Centre with any other candidate in or around the Examination Centre, before, during or after the Examination. • Disturbs the examination or attempts to do so • Impersonating for any other candidate in any examinations • Student is accused of Impersonation i.e. he /she managed to send somebody else in his / her place to take the examination. • Found guilty of serious misconduct in the examination hall. 	<p>All examinations of that Semester to be cancelled.</p> <p>The Student is not allowed to register in the immediate succeeding semester.</p> <p>The student shall register for the cancelled semester in the next academic year only e.g. if a student is booked for UFM in 3rd semester</p> <ul style="list-style-type: none"> • All papers of 3rd semester to be cancelled. • S/he can not register for 4th semester. • S/he shall re-register for 3rd semester in the next academic year only.
V	<ul style="list-style-type: none"> • Cases not covered under Category I to Category IV. 	To be decided by the Vice Chancellor on the recommendation of UFMSC

Note:

- These Rules shall be applicable w.e.f. the date of notification to all the students of the University irrespective of the year of admission to which he/she belongs.
- In these Regulations the year means the academic year.
- In case of extenuating circumstances, the above punishment may be reduced by the Vice Chancellor depending upon the merits of the case.
- If student repeats any of the act as prescribed in various categories the act, the level of punishment may be raised to next level.

SECTION-C

**Course Structure for the Master of Design Programme of Delhi
Technological University**

Master of Design (Interaction Design): Course Structure (For Virtual and Augmented Reality)

First Year 1st SEMESTER

CREDITS: 20

S. No.	Code	Course Title	Credit	Contact Hours/Week			
				L	T	S	Total
1	DD 511	Digital Representation Techniques	4	2	0	4	6
2	DD 513	Narrative Building	4	2	0	4	6
3	DD 515	User Centred Design	4	2	0	4	6
4	DD 517	Behavioural Dynamics in Design	4	2	0	4	6
5	DD 501	Design Project 1	4	0	0	0	0

First Year 2nd SEMESTER

CREDITS: 20

S. No.	Code	Course Title	Credit	Contact Hours/Week			
				L	T	S	Total
1	DD 512	Virtual and Augmented Reality	4	2	0	4	6
2	DD 514	Design of Human Experiences	4	2	0	4	6
3	DD 516	Usability Evaluation and Testing	4	2	0	4	6
4	DD 518	Creating and Experiencing Forms	4	2	0	4	6
5	DD 502	Design Project 2	4	0	0	0	0

Second Year 3rd SEMESTER

CREDITS: 20

S. No.	Code	Course Title	Credit	Contact Hours/Week			
				L	T	S	Total
1	DD 601	Organizational model for entrepreneurship	4	2	0	4	6
2	DD 613	Design for Society and Service Design	4	2	0	4	6
3	DD 615	Elective from other Discipline	4	2	0	4	6
4	DD 603	Design Project 3	4	2	0	4	6
5	DD 605	Internship	4	0	0	0	0
6	DD 607	Design Research Seminar	2	0	0	0	0

Second Year 4th SEMESTER

CREDITS: 20

S. No.	Code	Course Title	Credit	Contact Hours/Week			
				L	T	S	Total
1	DD 602	Sponsored/ Self Sponsored Project	20	0	0	0	0

Weights for Course Evaluation

S. No.	Course Type			Examination		Relative Weight				
	L	T	S	TH	ST	CWS	STS	MTE	ETE	STE
1.	2	0	4	Yes	Yes	10	40	10	20	20
2.	0	0	0	No	Yes	0	50	20	0	30

STE: Students semester work to be presented before jury.

CWS: Assignment based on lectures

STS: Work done in studios

MTE / ETE: Written test based on lecture

Interaction Design Semester I

Subject Code: DD 511

Contact Hours:

Examination Duration (Hrs)

Relative Weight:

Credit: 4

Pre Requisite: NIL

Course Title: Digital Representation Techniques

L: 2 T: 0 S: 4

Studio: 4 hrs

Theory: 2 hrs

CWS-10 STS-40 MTE-10 ETE-20 STE-20

Aim: To develop an understanding about the different representation techniques.

Details of the Course

S. No.	Contents	Contact weeks
1	Representing the observed, Representing concept- Sketching for ideation, object representation through memory and imagination and figure drawing.	3
2	One point, two point, and three point perspective, Grid based Drawing	4
3	Basics of Rendering - Shading, filling areas, shading a cube, cylinder, and sphere, basics of shadows on cube and cylinder Shading corners, cones, sphere, combined shapes, different materials and vignettes.	3
4	Exposure and demonstration to Illustration and Image making software Vector illustrations, Digital sketching.	4
Total		14

Outcome: Capabilities to draw with correct proportions, perspective, depth and volume. Students will gain the skills of 2D and 3D. Visualization of products in 3D space and representation of the same. Capabilities to evolve criteria as well as aesthetic decision making abilities to design.

Reference Books:

1. Steur, R. & Eissen, K. (2011). Sketching: The Basics. BIS Publishers.
2. Norling, E. (2008). Perspective Made Easy. BN Publishing.
3. Henry, K. (2012) Drawing for Product Designers. Laurence King Publishers
4. Illustrator, Photoshop and InDesign Manuals, Tutorials
5. The Art of 3D Drawing: An illustrated and photographic guide to creating art with three-dimensional realism, by Stefan Pabst, Walter Foster Publishing

Subject Code: DD 513

Contact Hours:

Examination Duration (Hrs)

Relative Weight:

Credit: 4

Pre Requisite: NIL

Course Title: Narrative Building

L: 2 T: 0 S: 4

Theory: 2 hrs Studio: 4 hrs

CWS-10 STS-40 MTE-10 ETE-20 STE-20

Aim: To understand the narration techniques related to design.

Details of the Course

S. No.	Contents	Contact weeks
1	Sketching, Sketching for Scenario building, Illustrations for stories, Creating Illustrative personas	2
2	Storytelling in different forms, Visual storytelling, Audio storytelling, Vision stories	4
3	Communication Techniques such as Drama, Mime, Theatre, Video, Audio, Gestures etc.	4
4	Narrative Therapy, Exploring Novel Narration Techniques	4
	Total	14

Outcome: Exploring different methods of narrative building and to develop an understanding about narrations.

Reference Books

1. H. Porter Abbott (2002). The Cambridge Introduction to Narrative.
2. John L (2010) Joseph Urban.
3. Tamara. A and Pruitt. J (2010) The Essential Persona Lifecycle: Your Guide to Building and Using Personas

Subject Code: DD 515
Contact Hours:
Examination Duration (Hrs)
Relative Weight:
Credit: 4
Pre Requisite: NIL

Course Title: User Centered Design
L: 2 T: 0 S: 4
Theory: 2 hrs Studio: 4hrs
CWS-10 STS-40 MTE-10 ETE-20 STE-20

Aim: To understand and user centered design and develop different skills needed for development of user centered products and services.

Details of the Course

S. No.	Contents	Contact weeks
1	User Studies an Introduction and Ethnography	2
2	Ethnographic Observation, Understanding Emotional and Cultural Dimensions, Conducting Interviews, Protocols, Analysis of Interview Data	4
3	Different approaches to problem solving, Fish Bone, 5 Why's	4
4	Root Cause Analysis using various techniques. Exploring Through live projects.	4
	Total	14

Outcome: Students will be able to choose what techniques to apply for developing user centred products and services. An overall development of empathy towards the user while designing a product will be developed.

Reference Books

1. J. Creswell, Research design: qualitative, quantitative and mixed methods approach, 2002.
2. J. Nielsen, Usability Engineering, Morgan Kaufmann, San Francisco, 1993
3. R. Preece, Interaction Design: Beyond Human – Computer Interaction, John Wiley and Sons, Delhi, 2003
4. A. Cooper and R. Reimann, The Essentials of Interaction Design, John Wiley & Sons – Dream Tech India Pvt. Ltd, Delhi, 2003

Subject Code: DD 517

Contact Hours:

Examination Duration (Hrs)

Relative Weight:

Credit: 4

Pre Requisite: NIL

Course Title: Behavioural Dynamics in Design

L: 2 T: 0 S: 4

Theory: 2 hrs Studio: 4 hrs

CWS-10 STS-40 MTE-10 ETE-20 STE-20

Aim: Understanding the human behaviours, how human interact with the system.

Details of the Course

S. No.	Contents	Contact weeks
1	Definitions of Ergonomics and its application and overview, Concept of Man Machine Environment System, User compatibility, comfortability, adaptability, performance and productivity, environmental influencing factors affecting human performance	2
2	Understanding of product ergonomics; Concept of usability, usability by Form, Feature, function, material	4
3	Conducting a behavioural diagnosis and understanding users	4
4	Psycho-physiological aspects of Interface design (Control and Display design), Decision-making and Situation awareness	4
	Total	14

Outcome: Students will be able to recognize variety of products and systems to which design practice and guidance required to apply for making it user-centric design.

Reference Books

1. R. S. Bridger, Introduction to Ergonomics, 2nd Edition, Taylor & Francis, 2003
2. J. Dul, and B. Weerdmeester, Ergonomics for beginners, a quick reference guide, Taylor & Francis, 1993
3. C. D. Wicknes, S. E. Gordon, and Y. Liu, An Introduction to Human Factors Engineering, Longman, New York, 1997
4. Argyris, C. (1970). *Intervention theory and method: A behavioral science view* (pp. 12-35). Reading, MA: Addison-Wesley.
5. Long, J., & Whitefield, A. (Eds.). (1989). *Cognitive ergonomics and human-computer interaction* (Vol. 1). Cambridge University Press.
6. Gaines, B. R., & Monk, A. F. (2015). *Cognitive Ergonomics: Understanding, Learning, and Designing Human-Computer Interaction*. Academic Press.

Subject Code: DD 501

Course Title: Design Project 1

Contact Hours:

L: 0 T: 0 S: 0

Examination Duration (Hrs)

Theory: 0 hrs

Studio: 3hrs

Relative Weight: CWS-0 STS-30

MTE-20

ETE-0

STE-50

Credit: 4

Pre Requisite: NIL

Aim: To develop an understanding about the courses being taught and apply the same in the form of a Design Project.

Outcome: Students will be able to apply different theory and practical knowledge taught during the semester in the Design Project.

Interaction Design Semester II

Subject Code: DD 512

Hours:

Examination Duration (Hrs)

Relative Weight:

Credit: 4

Pre Requisite: NIL

Course Title: Virtual and Augmented Reality Contact

L: 2 T: 0 S: 4

Theory: 2 hrs Studio: 4 hrs

CWS-10 STS-40 MTE-10 ETE-20 STE-20

Aim: To understand the importance of AR and VR and their applications.

Details of the Course

S. No.	Contents	Contact weeks
1	Introduction to Application of AR,	4
2	Introduction to Application of VR	4
3	Applications related to AR and VR, Basic Programming and related Software, Unity3D, Vuforia, Adobe Aero etc.	4
4	Development of a AR/VR Project.	2
	Total	14

Outcome: Students will learn and appreciate the use of AR and VR and apply them in their Design Solutions.

Reference Books

1. Schmalstieg. D and Hollerer. T (2016) Augmented Reality : Principles and Practice (Usability)
2. Peddie. J Augmented Reality: Where We Will All Live
3. Rakesh. B (2019), Virtual Reality with VRTK4, Create Immersive VR Experiences Leveraging Unity3D and Virtual Reality Toolkit
4. Adobe Aero.

Subject Code: DD 514
Contact Hours:
Examination Duration (Hrs)
Relative Weight:
Credit: 4
Pre Requisite: NIL

Course Title: Design for Human Experiences
L: 2 T: 0 S: 4
Theory: 2 hrs Studio: 4 hrs
CWS-10 STS-40 MTE-10 ETE-20 STE-20

Aim: To understand the user and associated experiences

Details of the Course

S. No.	Contents	Contact weeks
1	Understanding all set of users, user classification, various user centric approaches	4
2	Human centric approach, Design for all, Empathy and Ethnographic Research, Design Intent	4
3	Lens of human centric design, HCD process, Evaluation techniques	4
4	Application of Human centric Design.	2
	Total	14

Outcome: Approach to problem-solving will challenge students to get out into the real world and test your ideas so you can arrive at exciting, unexpected solutions tailored to the needs of the people you serve.

Reference Books

1. Kabir, Z. (2011). User centric design of an NFC mobile wallet framework.
2. Lowdermilk, T. (2013). User-centered design: a developer's guide to building user-friendly applications. " O'Reilly Media, Inc."
3. Luma Institute. (2012). Innovating for people: Handbook of human-centered design methods. Luma Institute, LLC.

Subject Code: DD 516

Course Title: Usability Evaluation and Testing

Contact Hours:

L: 2 T: 0 S: 4

Examination Duration (Hrs)

Theory: 2 hrs Studio: 4 hrs

Relative Weight:

CWS-10 STS-40 MTE-10 ETE-20 STE-20

Credit: 4

Pre Requisite: NIL

Aim: To understand the constraints while designing products and applications keeping in mind the usability aspects.

Details of the Course

S. No.	Contents	Contact weeks
1	Story of transition in human society from Man-Machine Interaction to Human-Computer Interaction. Relationship between product complexity and mental workload.	4
2	Subjective and objective measurements of product complexity and mental workload. User centered design process for usable product design. Understanding users' mental models. Conduct of task analysis. Operational definitions of usability. Measurement of ease of use, efficiency and effectiveness of digital products.	4
3	Design of interactive products from usability perspective. Development of user screeners, testing protocols and conduct of usability tests. Usability Testing by creation of paper prototypes, wireframes, information architecture. Conduct of low fidelity tests, card sorting, reverse card sorting, affordance tests, high fidelity testing and brand testing.	4
4	Individual / group project exploring usability aspects and finding solutions. Student presentations.	2
Total		14

Outcome: Students will develop an understanding of the different usability aspects and related testing.

Reference Books

1. William Lidwill, Jill Butler, Kritina Holden, Universal Principles of Design: 100 Ways to Enhance Usability, Influence Perception, Increase Appeal, Make Better Design Decisions, and Teach Through Design, Rockport Publisher
2. Susan M. Weinschenk, 100 Things Every Designer Needs to Know about People, New Riders Publisher
3. Jef Raskin, The Humane Interface: New Directions for Designing Interactive Systems, Addison Wesley Professional

Subject Code: DD 518

Contact Hours:

Examination Duration (Hrs)

Relative Weight:

Credit: 4

Pre Requisite: NIL

Course Title: Creating and Experiencing Forms

L: 2 T: 0 S: 4

Theory: 2 hrs Studio: 4 hrs

CWS-10 STS-40 MTE-10 ETE-20 STE-20

Aim: To understand the importance emotions and expressions and their application in form manipulation with a methodological approach inspired from an object or concept which leads innovative and experiential forms.

Details of the Course

S. No.	Contents	Contact weeks
1	Introduction to Forms (2-3D), Form and Identity. Form and Function, Form as Expression, Meaning and Form. Form as Abstraction.	4
2	Designing Virtual forms.	4
3	Morphology of expression, Understanding Emotions, Expressions, Illusions and Senses, etc.	4
4	Individual Projects and Presentations.	2
	Total	14

Outcome: students will be able to appreciate the forms and the emotions and expressions that are conveyed through them.

Reference Books

1. Nature, A. F. F. (2011). A history of nature as model for design in engineering, architecture and Art. Rudolf Finsterwalder editor.
2. Benyus, J. M. (1997). Biomimicry: Innovation inspired by nature.
3. Bolton, J., Featherstone, D., & Connell, T. (2009). *Fancy Form Design*. SitePoint
4. Rand, P. (2017). *Design, form, and chaos*. Yale University Press.
5. Gerald C. Cupchik (2016). *The Aesthetics of Emotion: Up the Down Staircase of the Mind-Body*
6. Warren Shibles (1995). *Emotion in aesthetics*

Subject Code: DD 502

Contact Hours:

Examination Duration (Hrs)

Relative Weight: CWS-0

Credit: 4

Pre Requisite: NIL

Course Title: Design Project 2

L: 0 T: 0 S: 0

Theory: 0 hrs Studio: 3hrs

STS-30 MTE-20 ETE-0

STE-50

Aim: To develop an understanding about the courses being taught and apply the same in the form of a Design Project.

Outcome: Students will be able to apply different theory and practical knowledge taught during the semester in the Design Project.

Interaction Design Semester III

Subject Code: DD 601

Contact Hours:

Examination Duration (Hrs)

Relative Weight:

Credit: 4

Pre Requisite: NIL

Course Title: Organizational model for Entrepreneurship

L: 2 T: 0 S: 4

Theory: 2 hrs Studio: 4 hrs

CWS-10 STS-40 MTE-10 ETE-20 STE-20

Aim: To understand how modern business starts and run

Details of the Course

S. No.	Contents	Contact weeks
1	Entrepreneurship- Social, Corporate, trade, agriculture etc	4
2	Models- Investment model, Business plans, start-ups, ROI model etc	3
3	Legal aspects- contracts and agreement (NDA etc.), IPR	4
4	Ethics and code of conducts	3
	Total	14

Outcome: Students will learn to manage and supervise live projects as entrepreneur

Reference Books

1. Ted Crawford, *AIIGA Professional Practices in Graphic Design*, Allworth Press, 2008
2. Shan Preddy, *How to Run a Successful Design Business: The New Professional Practice*, Gower Publishing, Ltd., 2011

Subject Code: DD 613

Contact Hours:

Examination Duration (Hrs)

Relative Weight:

Credit: 4

Pre Requisite: NIL

Course Title: Design for Society and Service Design

L: 2 T: 0 S: 4

Theory: 2 hrs Studio: 4 hrs

CWS-10 STS-40 MTE-10 ETE-20 STE-20

Aim: To understand how to design for the society or a social cause.

Details of the Course

S. No.	Contents	Contact weeks
1	Application of design methodologies to tackle human issues. Understanding issues of the society. Introduction to Services; tying together humans, digital, and physical interactions.	4
2	Designers role in the society. Stakeholder Analysis; Providing insights into the relationships between people, technology and design, Understanding needs for bottom of the pyramid.; Learning from different case studies.	3
3	Delivering Services form the view of design thinking; understanding people's needs from a holistic view. Systems approach to service design.	4
4	Small projects for intervention from the view point of Social and Service Design	3
	Total	14

Outcome: Students will be able to look at society's issues and be able to solve them using service design and applied problem solving.

Reference Books

1. Nynke Tromp and Paul Hekkert (2018) Designing for Society: Products and Services for a Better World.
2. Robert Curedale (2013), Service Design: 250 Essential Methods
3. Robert Curedale (2013), Design Research Methods: 150 Ways to Inform Design
4. Lucy Kimbell (2015) , The Service Innovation Handbook: Action-oriented Creative Thinking Toolkit for Service Organizations
5. Elizabeth Resnick (2019), The Social Design Reader
6. C. K. Prahalad (2004), The Fortune at the Bottom of the Pyramid
7. Victor Papanek (1972), Design for the Real World

Subject Code: DD 603

Course Title: Design Project 3

Contact Hours:

L: 0 T: 0 S: 0

Examination Duration (Hrs)

Theory: 0 hrs Studio: 3hrs

Relative Weight: CWS-0

STS-30 MTE-20 ETE-0 STE-50

Credit: 4

Pre Requisite: NIL

Aim: To develop an understanding about the courses being taught and apply the same in the form of a Design Project.

Outcome: Students will be able to apply different theory and practical knowledge taught during the semester in the Design Project.

Subject Code: DD 605

Contact Hours:

Examination Duration (Hrs)

Relative Weight: CWS-0

Credit: 4

Pre Requisite: NIL

Course Title: Internship

L: 0 T: 0 S: 0

Theory: 0 hrs Studio: 0hrs

STS-30 MTE-20 ETE-0

STE-50

Aim: Students will be able to develop an understanding about how the industry works and apply the same in enhancing their portfolio.

Outcome: Students will get a know-how of how the Industry works and will be able to apply that experience into their work.

Subject Code: DD 607

Course Title: Design Research Seminar

Contact Hours:

L: 0 T: 0 S: 0

Examination Duration (Hrs)

Theory: 0 hrs

Studio: 0hrs

Relative Weight: CWS-0 STS-30

MTE-20

ETE-0

STE-50

Credit: 2

Pre Requisite: NIL

Aim: Students to present the work done in the Internship Program in the form of a seminar or student may also write Research Papers to be Presented in Conferences etc.

Outcome: Students will be able to Present/ Pitch his or her idea to the market / jury. They will also develop holistic research aptitude in preparation of this seminar.

Interaction Design Semester IV

Subject Code: DD 602

Contact Hours:

Examination Duration (Hrs)

Relative Weight: CWS-0

Credit: 20

Pre Requisite: NIL

Course Title: Sponsored/ Self Sponsored Project

L: 0 T: 0 S: 0

Theory: 0 hrs Studio: 0 hrs

STS-30 MTE-20 ETE-0 STE-50

Aim: Students to work on industry or self-sponsored project. Students willing to work on their own enterprise for the realization into a start-up is also encouraged.

Outcome: Students will be able to acquire skills, knowledge and experience needed for excelling in their respective fields.

**Master of Design (Product Design): Course Structure
(For Human & Environmental Care)**

First Year 1st SEMESTER

CREDITS: 20

S. No.	Code	Course Title	Credit	Contact Hours/Week			
				L	T	S	Total
1	DD 521	Representation Techniques	4	2	0	4	6
2	DD 523	Industrial Design Process and Practice	4	2	0	4	6
3	DD 525	Material and Process for Designer	4	2	0	4	6
4	DD 527	Behavioral Dynamics in Design	4	2	0	4	6
5	DD 501	Design Project 1	4	0	0	0	0

First Year 2nd SEMESTER

CREDITS: 20

S. No.	Code	Course Title	Credit	Contact Hours/Week			
				L	T	S	Total
1	DD 522	Form and Senses	4	2	0	4	6
2	DD 524	Design for Human Experiences	4	2	0	4	6
3	DD 526	Design for Sustainability	4	2	0	4	6
4	DD 528	Medical Technology Innovation	4	2	0	4	6
5	DD 502	Design Project 2	4	0	0	0	0

Second Year 3rd SEMESTER

CREDITS: 20

S. No.	Code	Course Title	Credit	Contact Hours/Week			
				L	T	S	Total
1	DD 601	Organizational model for entrepreneurship	4	2	0	4	6
2	DD 623	Strategic Design Management	4	2	0	4	6
3	DD 6xx	Elective from other Discipline	4	2	0	4	6
4	DD 603	Design Project 3	4	2	0	4	6
5	DD 605	Internship	4	0	0	0	0
6	DD 607	Design Research Seminar	2	0	0	0	0

Second Year 4th SEMESTER

CREDITS: 20

S. No.	Code	Course Title	Credit	Contact Hours/Week			
				L	T	S	Total
1	DD 602	Sponsored/ Self Sponsored Project	20	0	0	0	0

Weights for Course Evaluation

S. No.	Course Type			Examination		Relative Weight				
	L	T	S	TH	ST	CWS	STS	MTE	ETE	STE
1.	2	0	4	Yes	Yes	10	40	10	20	20
2.	0	0	0	No	Yes	0	50	20	0	30

STE: Students semester work to be presented before jury.

CWS: Assignment based on lectures

STS: Work done in studios

MTE / ETE: Written test based on lecture

Product Design Semester I

Subject Code: DD 521

Contact Hours:

Examination Duration (Hrs)

Relative Weight:

Credit: 4

Pre Requisite: NIL

Course Title: Representation Techniques

L: 2 T: 0 S: 4

Theory: 2 hrs

Studio: 4 hrs

CWS-10 STS-40

MTE-10 ETE-20

STE-20

Aim: To develop an understanding about the different representation techniques.

Details of the Course

S. No.	Contents	Contact weeks
1	Representing the observed, Representing concept- Sketching for ideation, object representation through memory and imagination and figure drawing.	3
2	One point, two point, and three point perspective, Grid based Drawing	4
3	Basics of Rendering - Shading, filling areas, shading a cube, cylinder, and sphere, basics of shadows on cube and cylinder Shading corners, cones, sphere, combined shapes, different materials and vignettes.	3
4	Exposure and demonstration to Illustration and Image making software Vector illustrations, Digital sketching.	4
	Total	14

Outcome: Capabilities to draw with correct proportions, perspective, depth and volume. Students will gain the skills of 2D and 3D. Visualization of products in 3D space and representation of the same. Capabilities to evolve criteria as well as aesthetic decision making abilities to design.

Reference Books:

1. Steur, R. & Eissen, K. (2011). Sketching: The Basics. BIS Publishers.
2. Norling, E. (2008). Perspective Made Easy. BN Publishing.
3. Henry, K. (2012) Drawing for Product Designers. Laurence King Publishers
4. Illustrator, Photoshop and InDesign Manuals, Tutorials
5. The Art of 3D Drawing: An illustrated and photographic guide to creating art with three-dimensional realism, by Stefan Pabst, Walter Foster Publishing

Subject Code: DD 523

Contact Hours:

Examination Duration (Hrs)

Relative Weight:

Credit: 4

Pre Requisite: NIL

Course Title: Industrial Design Process and practice

L: 2 T: 0 S: 4

Theory: 2 hrs Studio: 4 hrs

CWS-10 STS-40 MTE-10 ETE-20 STE-20

Aim: To understand the design process and practice

Details of the Course

S. No.	Contents	Contact weeks
1	Introduction to industrial revolutions, Industrial Design (ID), Product Design (PD), and Engineering Design (ED)	2
2	Industrial Design Process- Generic product design and development process, understanding of market and target audience.	4
3	Product Value, Levels of Products, principles associated with Industrial Design	4
4	Evaluation techniques for concept selection and testing.	4
	Total	14

Outcome: Explore diverse tools, methods to conceptualize and generate effective solutions to design problem

Reference Books

1. Hann, M. (2013). Structure and Form in Design: Critical Ideas for Creative Practice. A&C Black.
2. Boden, M. A. (2012). Creativity and art: three roads to surprise.
3. Cuffaro, D., & Zaksenberg, I. (2013). The Industrial Design Reference & Specification Book: Everything Industrial Designers Need to Know Every Day. Rockport Publishers.
4. Ulrich, K. T. (2003). Product design and development. Tata McGraw-Hill Education.
5. Roozenburg, N. F., & Eekels, J. (1995). Product design: fundamentals and methods.
6. Mohr, J. J., Sengupta, S., & Slater, S. F. (2009). Marketing of high-technology products and innovations. Pearson Prentice Hall.

Subject Code: DD 525

Contact Hours:

Examination Duration (Hrs)

Relative Weight:

Credit: 4

Pre Requisite: NIL

Course Title: Material and Processes for Designer

L: 2 T: 0 S: 4

Theory: 2 hrs Studio: 4 hrs

CWS-10 STS-40 MTE-10 ETE-20 STE-20

Aim: To understand and identify various material, properties, and processes involved in product development process.

Details of the Course

S. No.	Contents	Contact weeks
1	Introduction to materials, types, properties	2
2	Thermoplastics and Thermosetting plastics, classification, and applications	4
3	Different manufacturing processes like machining, casting, moulding etc.	4
4	Material exploration: using MDF, PoP, wire etc., Design from waste/ discard.	4
	Total	14

Outcome: Students will be able to choose appropriate material and processes for designing a product.

Reference Books

1. Lefteri, C. (2013). Materials for design. Laurence King Publishing.
2. Garratt, J. (1996). Design and technology. Cambridge University Press.
3. Ashby M., Johnson K., 2002, Materials and Design: The Art and Science of Material Selection in Product Design: Butterworth-Heinemann.
4. Beck R. D.: Plastic Product Design, Van Nostrand Reinhold Co., New York, 1980
5. Thompson R.: Manufacturing processes for design professionals, Thames & Hudson, London 2007
6. Degarmo E. P., Materials and Processes in Manufacturing, 9th ed., John Wiley & Sons, 2002
7. Callister, W. D., & Rethwisch, D. G. (2011). Materials science and engineering (Vol. 5, pp. 344-348). NY: John Wiley & sons.
8. Ghosh, A., & Mallik, A. K. (1986). Manufacturing science. Ellis Horwood, 1986.

Subject Code: DD 527

Contact Hours:

Examination Duration (Hrs)

Relative Weight:

Credit: 4

Pre Requisite: NIL

Course Title: Behavioural Dynamics in Design

L: 2 T: 0 S: 4

Theory: 2 hrs Studio: 4 hrs

CWS-10 STS-40 MTE-10 ETE-20 STE-20

Aim: Understanding the human behaviours, how human interact with the system.

Details of the Course

S. No.	Contents	Contact weeks
1	Definitions of Ergonomics and its application and overview, Concept of Man Machine Environment System, User compatibility, comfortability, adaptability, performance and productivity, environmental influencing factors affecting human performance	2
2	Understanding of product ergonomics; Concept of usability, usability by Form, Feature, function, material	4
3	Conducting a behavioural diagnosis and understanding users	4
4	Psycho-physiological aspects of Interface design (Control and Display design), Decision-making and Situation awareness	
	Total	14

Outcome: Students will be able to recognize variety of products and systems to which design practice and guidance required to apply for making it user-centric design.

Reference Books

1. R. S. Bridger, Introduction to Ergonomics, 2nd Edition, Taylor & Francis, 2003
2. J. Dul, and B. Weerdmeester, Ergonomics for beginners, a quick reference guide, Taylor & Francis, 1993
3. C. D. Wicknes, S. E. Gordon, and Y. Liu, An Introduction to Human Factors Engineering, Longman, New York, 1997
4. Argyris, C. (1970). *Intervention theory and method: A behavioral science view* (pp. 12-35). Reading, MA: Addison-Wesley.
5. Long, J., & Whitefield, A. (Eds.). (1989). *Cognitive ergonomics and human-computer interaction* (Vol. 1). Cambridge University Press.
6. Gaines, B. R., & Monk, A. F. (2015). *Cognitive Ergonomics: Understanding, Learning, and Designing Human-Computer Interaction*. Academic Press.

Subject Code: DD 501

Course Title: Design Project 1

Contact Hours:

L: 0 T: 0 S: 0

Examination Duration (Hrs)

Theory: 0 hrs

Studio: 3hrs

Relative Weight: CWS-0 STS-30

MTE-20

ETE-0

STE-50

Credit: 4

Pre Requisite: NIL

Aim: To develop an understanding about the courses being taught and apply the same in the form of a Design Project.

Outcome: Students will be able to apply different theory and practical knowledge taught during the semester in the Design Project.

Product Design Semester II

Subject Code: DD 522

Contact Hours:

Examination Duration (Hrs)

Relative Weight:

Credit: 4

Pre Requisite: NIL

Course Title: Form and senses

L: 2 T: 0 S: 4

Theory: 2 hrs Studio: 4 hrs

CWS-10 STS-40 MTE-10 ETE-20 STE-20

Aim: To understand the importance of form manipulation with a methodological approach inspired from an object or concept which leads innovative forms.

Details of the Course

S. No.	Contents	Contact weeks
1	Introduction to Form and aesthetics. Form and Identity. Form and Function, Form as Expression, Meaning and Form. Form as Abstraction.	4
2	Naturalistic Form and inspirations from Nature. Understanding of forms and methods to develop it. Manipulation of forms in order to understand Positive and negative space.	4
3	Understanding of emotions and inspiration through form, and they can be communicated in tangible forms	4
4	Importance of senses during initial product development phase	2
	Total	14

Outcome: Students will learn and appreciate the intricacies of form creation and communicating ideas through Form.

Reference Books

1. Nature, A. F. F. (2011). A history of nature as model for design in engineering, architecture and Art. Rudolf Finsterwalder editor.
2. Benyus, J. M. (1997). Biomimicry: Innovation inspired by nature.
3. Bolton, J., Featherstone, D., & Connell, T. (2009). *Fancy Form Design*. SitePoint
4. Rand, P. (2017). *Design, form, and chaos*. Yale University Press.

Subject Code: DD 524

Contact Hours:

Examination Duration (Hrs)

Relative Weight:

Credit: 4

Pre Requisite: NIL

Course Title: Design for Human experiences

L: 2 T: 0 S: 4

Theory: 2 hrs Studio: 4 hrs

CWS-10 STS-40 MTE-10 ETE-20 STE-20

Aim: To understand the user and associated experiences

Details of the Course

S. No.	Contents	Contact weeks
1	Understanding all set of users, user classification, various user centric approaches	4
2	Human centric approach, design for all, empathy and ethnographic research, design intent	4
3	Lens of human centric design, HCD process, Evaluation techniques	4
4	Application of Human centric Design.	2
	Total	14

Outcome: Approach to problem-solving will challenge students to get out into the real world and test your ideas so you can arrive at exciting, unexpected solutions tailored to the needs of the people you serve.

Reference Books

1. Kabir, Z. (2011). User centric design of an NFC mobile wallet framework.
2. Lowdermilk, T. (2013). User-centered design: a developer's guide to building user-friendly applications. " O'Reilly Media, Inc.".
3. Luma Institute. (2012). Innovating for people: Handbook of human-centered design methods. Luma Institute, LLC.

Subject Code: DD 526

Contact Hours:

Examination Duration (Hrs)

Relative Weight:

Credit: 4

Pre Requisite: NIL

Course Title: Design for Sustainability

L: 2 T: 0 S: 4

Theory: 2 hrs Studio: 4 hrs

CWS-10 STS-40 MTE-10 ETE-20 STE-20

Aim: To understand the concerns with human and environment care and achieving these in a sustained manner.

Details of the Course

S. No.	Contents	Contact weeks
1	What makes the biological Ecosystem so creative and sustainable? Creativity & Care. Self-reliant, dependence and interdependence, Symbiosis in nature. Optimal use of material, energy and information. Optimized growth. Compatibility between form and function. Self-recovery.	4
2	Upgradability. Enhancing propensity for growth. Technical design for functionality, emotional design for interactivity. Understanding design sophistication in nature.	4
3	Concept of wellness in nature. Independence, dependence and interdependence, Symbiosis in nature. 3P Diagram and beyond. Life-cycle analysis, Cradle-to-Cradle, Frugal Design Through Sustainability, Production, unfolding wholeness, Sustainability matrices. Material / Process / Design	4
4	Individual / group project exploring sustainability challenges and finding solutions. Student presentations.	2
Total		14

Outcome: Students will develop an understanding of the different concerns pertaining to the environment and their role as a designer in achieving

Reference Books

1. Mendler, S., & Odell, W. (2000). The HOK guidebook to sustainable design. John Wiley & Sons.
2. Williams, D. E. (2007). Sustainable design: Ecology, architecture, and planning. John Wiley & Sons.
3. Walker, S. (2012). Sustainable by design: Explorations in theory and practice. Routledge.
4. Fairs, M. (2009). Green design: creative sustainable designs for the twenty-first century. North Atlantic Books.

Subject Code: DD 528
Contact Hours:
Examination Duration (Hrs)
Relative Weight:
Credit: 4
Pre Requisite: NIL

Course Title: Medical Technology Innovation
L: 2 T: 0 S: 4
Theory: 2 hrs Studio: 4 hrs
CWS-10 STS-40 MTE-10 ETE-20 STE-20

Aim: The course gives glimpse of innovating in the space of healthcare with hands on approach to identification of unmet clinical needs, invention and implementation of such technologies and also inculcate the entrepreneurial character in the students.

Details of the Course

S. No.	Contents	Contact weeks
1	Focus beyond the basics i.e. advanced technical aspects, such as advanced camera settings and lens techniques..	4
2	Enhance your photographic knowledge and mastery of subjects such as visual language, advanced composition and lighting.	4
3	Utilise digital workflow processes to ensure maximum accuracy and output quality	4
4	high and slow speed photography, Image processing for various application- Satellite images, medical related images etc	2
Total		14

Outcome: Ability to identify clinical needs and move in a stepwise approach through inventing and planning the implementation of a marketable solution.

Reference Books

1. Paul G. Yock, Biodesign: The Process of Innovating Medical Technologies, Second Edition.
2. Peter J. Ogradnik, Medical Device Design: Innovation from Concept to Market, First edition.
3. Badnjevic. A. (2018), Inspection of Medical Devices for Regulatory purpose, Springer.
4. Becker Karen M, Clinical Evaluation of Medical Devices, Humana Press

Subject Code: DD 502

Course Title: Design Project 2

Contact Hours:

L: 0 T: 0 S: 0

Examination Duration (Hrs)

Theory: 0 hrs Studio: 3hrs

Relative Weight: CWS-0

STS-30 MTE-20 ETE-0

STE-50

Credit: 4

Pre Requisite: NIL

Aim: To develop an understanding about the courses being taught and apply the same in the form of a Design Project.

Outcome: Students will be able to apply different theory and practical knowledge taught during the semester in the Design Project.

Product Design Semester III

Course Title: Organizational model for Entrepreneurship

L: 2 T: 0 S: 4

Theory: 2 hrs Studio: 4 hrs

CWS-10 STS-40 MTE-10 ETE-20 STE-20

Subject Code: DD 601

Contact Hours:

Examination Duration (Hrs)

Relative Weight:

Credit: 4

Pre Requisite: NIL

Aim: To understand how modern business starts and run.

Details of the Course

S. No.	Contents	Contact weeks
1	Entrepreneurship- Social, Corporate, trade, agriculture etc	4
2	Models- Investment model, Business plans, start-ups, ROI model etc	3
3	Legal aspects- contracts and agreement (NDA etc.), IPR	4
4	Ethics and code of conducts	3
	Total	14

Outcome: Students will learn to manage and supervise live projects as entrepreneur

Reference Books

1. Ted Crawford, AIGA Professional Practices in Graphic Design, Allworth Press, 2008
2. Shan Preddy, How to Run a Successful Design Business: The New Professional Practice, Gower Publishing, Ltd., 2011
3. Martin, R. L. (2009). The design of business: Why design thinking is the next competitive advantage. Harvard Business Press.
4. Best, K. (2006). Design management: managing design strategy, process and implementation. AVA publishing
5. Craig M. Vogel and Jonathan Cagan, Creating Breakthrough Products: Innovation from Product Planning Program Approval, FT Press, 2001

Subject Code: DD 623

Contact Hours:

Examination Duration (Hrs)

Relative Weight:

Credit: 4

Pre Requisite: NIL

Course Title: Strategic Design Management

L: 2 T: 0 S: 4

Theory: 2 hrs Studio: 4 hrs

CWS-10 STS-40 MTE-10 ETE-20 STE-20

Aim: To understand how to use strategies in Design and Management.

Details of the Course

S. No.	Contents	Contact weeks
1	Nature of strategic Design, Introducing strategic design: Tangible Vs Intangible design, Design thinking vs Strategic thinking, etc.	4
2	Tools for strategic design, innovation through strategic design, Design process management	3
3	Design driven innovation, strategic design models	4
4	Corporate responsibility and design	3
	Total	14

Outcome: Students will learn strategize and Design accordingly.

Reference Books

1. Cooper, R., Junginger, S., & Lockwood, T. (Eds.). (2013). The handbook of design management. A&C Black
2. Kathryn Best, The Fundamentals of Design Management, AVA Publishing, 2010
3. Brigitte Borja De Mozota, Design Management: Using Design to Build Brand Value and Corporate Innovation, Allworth Press, 2004
4. Kenneth B Khan, Product Planning Essentials, M E Sharpe Inc, 2011
5. John Stark, Product Lifecycle Management: 21st Century Paradigm for Product Realisation, Springer, 2011
6. David L. Rainey, Product Innovation: Leading Change through Integrated Product Development, Cambridge University Press, 2011

Subject Code: DD 603

Contact Hours:

Examination Duration (Hrs)

Relative Weight: CWS-0

Credit: 4

Pre Requisite: NIL

Course Title: Design Project 3

L: 0 T: 0 S: 0

Theory: 0 hrs Studio: 3hrs

STS-30 MTE-20 ETE-0

STE-50

Aim: To develop an understanding about the courses being taught and apply the same in the form of a Design Project.

Outcome: Students will be able to apply different theory and practical knowledge taught during the semester in the Design Project.

Subject Code: DD 605

Contact Hours:

Examination Duration (Hrs)

Relative Weight: CWS-0

Credit: 4

Pre Requisite: NIL

Course Title: Internship

L: 0 T: 0 S: 0

Theory: 0 hrs Studio: 0hrs

STS-30 MTE-20 ETE-0

STE-50

Aim: Students will be able to develop an understanding about how the industry works and apply the same in enhancing their portfolio.

Outcome: Students will get a know-how of how the Industry works and will be able to apply that experience into their work.

Subject Code: DD 607

Contact Hours:

Examination Duration (Hrs)

Relative Weight: CWS-0 STS-30

Credit: 2

Pre Requisite: NIL

Course Title: Design Research Seminar

L: 0 T: 0 S: 0

Theory: 0 hrs

MTE-20

Studio: 0hrs

ETE-0

STE-50

Aim: Students to present the work done in the Internship Program in the form of a seminar or student may also write Research Papers to be Presented in Conferences etc.

Outcome: Students will be able to Present/ Pitch his or her idea to the market / jury. They will also develop holistic research aptitude in preparation of this seminar.

Product Design

Semester IV

Subject Code: DD 602

Contact Hours:

Examination Duration (Hrs)

Relative Weight: CWS-0 STS-30

Credit: 20

Pre Requisite: NIL

Course Title: Sponsored/ Self Sponsored Project

L: 0 T: 0 S: 0

Theory: 0 hrs

MTE-20

Studio: 0 hrs

ETE-0

STE-50

Aim: Students to work on industry or self-sponsored project. Students willing to work on their own enterprise for the realization into a start-up is also encouraged.

Outcome: Students will be able to acquire skills, knowledge and experience needed for excelling in their respective fields.

**Master of Design (Visual Communication): Course Structure
(Emotional and Technical)**

First Year 1st SEMESTER

CREDITS: 20

S. No.	Code	Course Title	Credit	Contact Hours/Week			
				L	T	S	Total
1	DD 531	Visual Culture & Media Practices	4	2	0	4	6
2	DD 533	Communication Design Fundamentals	4	2	0	4	6
3	DD 535	Image Fabrication & Visualization	4	2	0	4	6
4	DD 537	Video, Sound & Cinematography	4	2	0	4	6
5	DD 501	Design Project 1	4	0	0	0	0

First Year 2nd SEMESTER

CREDITS: 20

S. No.	Code	Course Title	Credit	Contact Hours/Week			
				L	T	S	Total
1	DD 532	Experimental Communication	4	2	0	4	6
2	DD 534	Space and Service Design	4	2	0	4	6
3	DD 536	Narrative Contexts and Advanced Illustration	4	2	0	4	6
4	DD 538	Motion Graphics and Animation Fundamentals	4	2	0	4	6
5	DD 502	Design Project 2	4	0	0	0	0

Second Year 3rd SEMESTER

CREDITS: 20

S. No.	Code	Course Title	Credit	Contact Hours/Week			
				L	T	S	Total
1	DD 601	Organizational model for entrepreneurship	4	2	0	4	6
2	DD 633	Major campaign planning & Design	4	2	0	4	6
3	DD 635	Advanced Animation & Game Design	4	2	0	4	6
4	DD 603	Design Project 3	4	2	0	4	6
5	DD 605	Internship	4	0	0	0	0
6	DD 607	Design Research Seminar	2	0	0	0	0

Second Year 4th SEMESTER

CREDITS: 20

S. No.	Code	Course Title	Credit	Contact Hours/Week			
				L	T	S	Total
1	DD 602	Sponsored/ Self Sponsored Project	20	0	0	0	0

Weights for Course Evaluation

S. No.	Course Type			Examination		Relative Weight				
	L	T	S	TH	ST	CWS	STS	MTE	ETE	STE
1.	2	0	4	Yes	Yes	10	40	10	20	20
2.	0	0	0	No	Yes	0	50	20	0	30

STE: Students semester work to be presented before jury.

CWS: Assignment based on lectures

STS: Work done in studios

MTE / ETE: Written test based on lecture

Visual Communication Semester I

Subject Code: DD531

Contact Hours:

Examination Duration (Hrs)

Relative Weight:

Credit: 4

Semester: 1

Prerequisite: NIL

Aim: To provide an understanding of contemporary culture, media, and society by diving deep into visual perspectives through knowledge, beliefs, art, morals, laws, and customs.

Course Title: Visual Culture & Media Practices

L: 2 T: 0 S: 4

Theory: 2 hrs Studio: 4

CWS-10 STS-40 MTE-10 ETE-20 STE-20

Details of the Course

S. No	Contents	Contact weeks
1	Visual Culture as an interdisciplinary field of study including the interaction of anthropology, art history, media studies, and others. Historical examples, origin, developments in India, and across the world.	3
2	A world of cross-mediation, Visual culture as an 'Experience' and impact of its multiple forms, and visual content, theories, and codes. Understanding of the transformed and expanded nature of globalized visual culture in the 21st century and how design has shifted in visual communication and allied areas of disciplines.	3
3	Media studies such as Painting/Illustration, Sculpture/ Installation, Video, Digital art, Photography, Film/ Television, The Internet, Mobile screen devices, Fashion, Medical & scientific imaging, Social spaces of galleries, exhibitions, and other private and public environments of the everyday.	4
4	The changing nature of subjectivity vs objectivity, ways to visualize, reflect upon, and represent the world to ourselves, Execution of individual projects/ reports/ articles/ papers on the chosen topic/s.	4
Total		14

Outcome: Students will be able to analyze a given visual culture and make use of this useful tool in understanding more about the world we live in, along with exploring a range of media.

Books Recommended

S.No.	Name of Authors / Books / Publishers	Year
1	The Handbook of Visual Culture by Ian Heywood (Editor), Barry Sandywell (Editor)	2017
2	Ways of Seeing: Based on the BBC Television Series by John Berger	1990
3	Practices of Looking: An Introduction to Visual Culture 2nd Edition by Marita Sturken	2009
4	The Indian Media Business by Vanita Kohli-Khandekar	2017

Subject Code: DD533

Contact Hours:

Examination Duration (Hrs)

Relative Weight:

Credit: 4

Semester: 1

Prerequisite: NIL

Aim: To provide an understanding of the relationship between observation, thinking, and visual articulation by working and exploring different mediums, tools, and styles keeping in mind the strong fundamentals of communication theories.

Course Title: Communication Design Fundamentals

L: 2 T: 0 S: 4

Theory: 2 hrs Studio: 4

CWS-10 STS-40 MTE-10 ETE-20 STE-20

Details of the Course

S. No.	Contents	Contact weeks
1	Fundamentals of communication, Communication theory, concepts of cognition, perception, and visual literacy.	3
2	Introduction to processes, materials, methods required for the creation, and production of visual communication. Study of composition, layout, and representation techniques for effective visual communication.	3
3	Image creation, Drawing and sketching to explore inventive shapes & forms, Exploration of rendering techniques, and study of illustration various styles.	4
4	Working with Text, Typography, Graphic production, Logo Design	4
Total		14

Outcome: Students will be able to effectively communicate and produce a variety of works in graphic design, typography, and Illustration for publication as well as online media.

Books Recommended

S.No.	Name of Authors / Books / Publishers	Year
1	Visual Communication Design: An Introduction to Design Concepts in Everyday Experience by Jamer Hunt and Meredith Davis	2017
2	Art and Visual Perception by Rudolf Arnheim	1954
3	Typography Sketchbooks by Lita Talarico and Steven Heller	2011
4	History of Illustration by Susan Doyle (Editor), Jaleen Grove (Editor), Whitney Sherman (Editor)	2018

Subject Code: DD535

Contact Hours:

Examination Duration (Hrs)

Relative Weight:

Credit: 4

Semester: 1

Prerequisite: NIL

Course Title: Image Fabrication & Visualization

L: 2 T: 0 S: 4

Theory: 2 hrs Studio: 4

CWS-10 STS-40 MTE-10 ETE-20 STE-20

Aim: To provide an understanding of working with digital applications and other image capturing tools effectively to deliver a desired thematic expression for self as well as for a client.

Details of the Course

S. No.	Contents	Contact weeks
1	Working with vector and raster images, Digital image production, Working with digital tools & applications such as Photoshop, Illustrator, and Indesign.	4
2	Study of Photography, tools & techniques of Image capturing, Lightning, Exposure, standard, and Experimental photography techniques to produce commercial and fine arts images.	4
3	Post-processing, Photo/ Image Editing, manipulation, Color fundamental, and creative treatment of images such as superimposition & juxtaposition.	3
4	Digital matte, futuristic, landscape painting, Cinematographic compositions, Theme based digital experimental works.	3
Total		14

Outcome: Students will be able to produce a variety of digital images by capturing, drawing, editing, manipulation of pixels to visualize a conceptual brief for a variety of projects and media.

Books Recommended

S.No.	Name of Authors / Books / Publishers	Year
1	Design with Adobe Creative Cloud Classroom in a Book: Basic Projects using Photoshop, InDesign, Muse, and More by Conrad Chavez	2013
2	Experimental Photography: A Handbook of Techniques by L. Bendandi, Gabriele Lungarella, Sergio Minniti, Francisco Gómez, Marco Antonini	2015
3	Photoshop: Photo Manipulation Techniques to Improve Your Pictures to World Class Quality Using Photoshop by John Slavio	2017
4	Cinematography: Theory and Practice: Image Making for Cinematographers and Directors Kindle Edition by Blain Brown	2016

Subject Code: DD537
Contact Hours:
Examination Duration (Hrs)
Relative Weight:
Credit: 4
Semester: 1
Prerequisite: NIL

Course Title: Video, Sound & Cinematography
L: 2 T: 0 S: 4
Theory: 2 hrs Studio: 4
CWS-10 STS-40 MTE-10 ETE-20 STE-20

Aim: To provide an understanding of video production, sound design, and working in moving media to tell a captivating story/s to the audiences.

Details of the Course

S. No.	Contents	Contact weeks
1	Introduction to Film, Storytelling Techniques, Film History, Still vs Moving photography,	4
2	Scriptwriting, Storyboard, Cinematography, Compositional Techniques & Movement, White Balance & Lighting	4
3	Working with Audio Technology, Recording, Sound Design & effects, Tools & Techniques	3
4	Post-Production & Motion Graphics, Compositing, Editing, Packaging of Film/ Documentary/ TVC/ Video & promotion,	3
Total		14

Outcome: Conception and production of short films on a range of educational, cultural, social, entertainment, and marketing communication needs.

Books Recommended

S.No.	Name of Authors / Books / Publishers	Year
1	The filmmaker's handbook by Ed Pincus	1984
2	Painting with Light by John Alton	1949
3	Sound-on-film: Interviews with Creators of Film Sound by Vincent LoBrutto	1994
4	The Video Editing Handbook by Aaron Goold	2017

Subject Code: DD501
Contact Hours:
Examination Duration (Hrs)
Relative Weight:
Credit: 4
Semester: 1
Prerequisite: NIL

Course Title: Design Project 1
L: 0 T: 0 S: 0
Theory: 0 hrs Studio: 2
CWS-0 STS-30 MTE-20 ETE-0

STE-50

Aim: To provide students with an understanding of using Design Research Methods and Explorative Techniques to focus on the problem-solving process.

Outcome: Students will apply, learn and appreciate the importance of research methods and exploration techniques in order to solve the given design problem in an appropriate way.

Books Recommended

S.No.	Name of Authors / Books / Publishers	Year
1	Designing Brand Identity by Alina Wheeler	2017
2	Show Your Work! By Austin Kleon	2014
3	How to Be a Graphic Designer without Losing Your Soul by Adrian Shaughnessy	2010
4	Reportage Illustration: Visual Journalism by Gary Embury and Mario Minichiello	2018

Visual Communication Semester II

Subject Code: DD532
Contact Hours:
Examination Duration (Hrs)
Relative Weight:
Credit: 4
Semester: 2
Prerequisite: NIL

Course Title: Experimental Communication
L: 2 T: 0 S: 4
Theory: 2 hrs Studio: 4
CWS-10 STS-40 MTE-10 ETE-20 STE-20

Aim: To provide an understanding of the cross-disciplinary approach in solving contemporary design and world problems.

Details of the Course

S. No.	Contents	Contact weeks
1	Cross-fertilization of ideas, technology, and media in an interdisciplinary system. Importance of Inspiration, Exploration, and Imagination beyond traditional practices and methods.	3
2	Visual Communication with ideas embedded in psychotherapy, illustrators moving towards Land Art and field recording, digital programming converging with sculpture and performance.	4
3	Working with Digital aesthetics, processing, Experimental films using the latest technology such as Augmented and Virtual reality.	3
4	Collaborative project/s with Arts, engineering, science, and management, etc. to explore sonic, haptic, spatial, and experimental communication.	4
Total		14

Outcome: Students will be able to attempt and produce an experimental solution/ concept by working and collaborating with other domains.

Books Recommended

S.No.	Name of Authors / Books / Publishers	Year
1	Installation and the Moving Image by Catherine Elwes	2015
2	Experimental Filmmaking: Break the Machine by Kathryn Ramey	2015
3	Digital Performance by Steve Dixon	2007
4	The Software Arts by Warren Sack	2019
5	New Media in Art (World of Art) by Michael Rush	2005

Subject Code: DD534
Contact Hours:
Examination Duration (Hrs)
Relative Weight:
Credit: 4
Semester: 2
Prerequisite: NIL

Course Title: Space and Service Design
L: 2 T: 0 S: 4
Theory: 2 hrs Studio: 4
CWS-10 STS-40 MTE-10 ETE-20 STE-20

Aim: To provide an understanding of space and service design by exploring the content, context, and spatial aspects of design challenges/ problems.

Details of the Course

S. No.	Contents	Contact weeks
1	Navigation design, signages, and wayfinding for space/ building/ Event	5
2	Event branding, Installations, Interactive Projections, Stage design, Curatorial practices	5
3	Designing for a service, Window display design, Packaging Design and collaterals	4
	Total	14

Outcome: Students will be able to execute a variety of projects related to the event, service branding as well as navigation design for public and commercial buildings.

Books Recommended

S.No.	Name of Authors / Books / Publishers	Year
1	The wayfinding handbook by David Gibson	2009
2	The Contexts of Curating by Terry Smith	2020
3	Visual Merchandising 2nd Edition by Antony J. Morgan	2008
4	Structural Packaging: Design Your Own Boxes and 3-D Forms by Paul Jackson	2012

Subject Code: DD536

Course Title: Narrative Contexts and Advanced Illustration

Contact Hours:

L: 2 T: 0 S: 4

Examination Duration (Hrs)

Theory: 2 hrs Studio: 4

Relative Weight:

CWS-10 STS-40 MTE-10 ETE-20 STE-20

Credit: 4

Semester: 2

Prerequisite: NIL

Aim: To provide an understanding of narrative building and conceptual solutions to the problems and to convey ideas in a clear and interesting way using a variety of drawing and illustration techniques.

Details of the Course

S. No.	Contents	Contact weeks
1	Methods of communicating narratives through image-making, the relationship between text and image, different approaches in visual story-telling	2
2	Story/ Idea generation, Script, Tone of Voice, Characters, Storyboarding, Colour palette, Illustration styles, Experiment with look & feel, Media- Digital vs traditional	4
3	Publication design, Explore ways of designing and producing books, image-based photo book, an experimental grid-based book produced using inexpensive materials, large-scale book project	4
4	Comic book styles, Biographical comics, Graphic novels, Children books, Corporate graphics, Editorial illustration, Illustration for Print media vs Online.	4
Total		14

Outcome: Students will be able to create illustrative books, graphic novels, comic books and other types of illustrative works.

Books Recommended

S.No.	Name of Authors / Books / Publishers	Year
1	Picture this by Molly Bang	1991
2	365 Days of Art: A Creative Exercise for Every Day of the Year by Lorna Scobie	2017
3	Illustration Workshop: Find Your Style, Practice Drawing Skills, and Build a Stellar Portfolio by Mary Kate McDevitt	2018
4	Illustration Next: Contemporary Creative Collaboration by Ana Benaroya	2013

Subject Code: DD538
Contact Hours:
Examination Duration (Hrs)
Relative Weight:
Credit: 4
Semester: 2
Prerequisite: NIL

Course Title: Motion Graphics and Animation Fundamentals
L: 2 T: 0 S: 4
Theory: 2 hrs Studio: 4
CWS-10 STS-40 MTE-10 ETE-20 STE-20

Aim: To provide an understanding of procedures and techniques to facilitate the process of creating animation and motion design stories.

Details of the Course

S. No.	Contents	Contact weeks
1	Understanding the interface, tools, and workflow of motion graphic and visual effect application.	4
2	Traditional vs digital animation, Principles, Techniques, terminology, and exploration of styles and media	3
3	Storyboarding for animation and motion graphics, Animation for logos, titles, various motion effects	3
4	Character design, animating the scenes, sequence, flow, sound, and compositing to produce animation and motion graphic shorts.	4
	Total	14

Outcome: Students will be able to learn to conceptualize ideas and transform them into animated graphics and films.

Books Recommended

S.No.	Name of Authors / Books / Publishers	Year
1	The Animator's Survival Kit by Richard Williams	2001
2	The Animation Book: A Complete Guide to Animated Filmmaking--From Flip-Books to Sound Cartoons to 3- D Animation by Kit Laybourne	1998
3	Design for Motion: Fundamentals and Techniques of Motion Design by Austin Shaw	2015
4	Animated Storytelling: Simple Steps For Creating Animation and Motion Graphics by Liz Blazer	2015

Subject Code: DD502

Contact Hours:

Examination Duration (Hrs)

Relative Weight:

Credit: 4

Semester: 2

Prerequisite: NIL

Course Title: Design Project 2

L: 0 T: 0 S: 0

Theory: 0 hrs Studio: 2

CWS-0 STS-30 MTE-20 ETE-0

STE-50

Aim: To provide students with an understanding of using Design Research Methods and Explorative Techniques to focus on the problem-solving process.

Outcome: Students will apply, learn and appreciate the importance of research methods and exploration techniques in order to solve the given design problem in an appropriate way.

Books Recommended

S. No.	Name of Authors / Books / Publishers	Year
1	Designing Brand Identity by Alina Wheeler	2017
2	Show Your Work! By Austin Kleon	2014
3	How to Be a Graphic Designer without Losing Your Soul by Adrian Shaughnessy	2010
4	Reportage Illustration: Visual Journalism by Gary Embury and Mario Minichiello	2018

Visual Communication Semester III

Subject Code: DD601

Contact Hours:

Examination Duration (Hrs)

Relative Weight:

Credit: 4

Semester: 3

Prerequisite: NIL

Course Title: Organizational model for Entrepreneurship

L: 2 T: 0 S: 4

Theory: 2 hrs Studio: 4

CWS-10 STS-40 MTE-10 ETE-20 STE-20

Aim: To understand how a modern business starts and runs.

Details of the Course

S. No.	Contents	Contact weeks
1	Entrepreneurship- Social, Corporate, trade, agriculture, etc	4
2	Models- Investment model, Business plans, start-ups, ROI model, etc	3
3	Legal aspects- contracts and agreement (NDA, etc.), IPR	4
4	Ethics and code of conducts	3
Total		14

Outcome: Students will learn to manage and supervise live projects as entrepreneurs.

Books Recommended

S.No.	Name of Authors / Books / Publishers	Year
1	Ted Crawford, AIGA Professional Practices in Graphic Design, Allworth Press	2008
2	Shan Preddy, How to Run a Successful Design Business: The New Professional Practice, Gower Publishing, Ltd.	2011

Subject Code: DD633

Contact Hours:

Examination Duration (Hrs)

Relative Weight:

Credit: 4

Semester: 3

Prerequisite: Communication Design Fundamentals

Course Title: Major campaign planning & Design

L: 2 T: 0 S: 4

Theory: 2 hrs Studio: 4

CWS-10 STS-40 MTE-10 ETE-20 STE-20

Aim: To provide an understanding of the creation and dissemination of the image and voice for a collective entity, such as a company or an institution.

Details of the Course

S. No.	Contents	Contact weeks
1	Understand the history and culture of the making of big brands, their positioning, and branding. Exploration of brand insights, image building, and brand story.	5
2	Research to explore and develop innovative positioning, branding and marketing possibilities	4
3	Execution in different media, Presentation, and feedback	5
	Total	14

Outcome: Students will be able to push beyond their previous experience towards professional skills and practices for identity design.

Books Recommended

S.No.	Name of Authors / Books / Publishers	Year
1	Designing Brand Identity: An Essential Guide for the Whole Branding Team by Alina Wheeler	2003
2	Creating a Brand Identity: A Guide for Designers: (Graphic Design Books, Logo Design, Marketing) by Catharine Slade-Brooking	2016
3	The Dictionary of Brand by Marty Neumeier	2004

\Subject Code: DD635

Course Title: Advanced Animation & Game design

Contact Hours:

L: 2 T: 0 S: 4

Examination Duration (Hrs)

Theory: 2 hrs Studio: 4

Relative Weight:

CWS-10 STS-40 MTE-10 ETE-20 STE-20

Credit: 4

Semester: 3

Prerequisite: Motion Graphics and Animation Fundamentals

Aim: To provide an understanding of advanced concepts, techniques, and production of hi-end animation and game design projects.

Details of the Course

S. No.	Contents	Contact weeks
1	Advanced animation and Serious Game Design & Research	5
2	Interactive Application Development using animation and games. Gamification for advertising	5
3	Experimentation with Virtual & Augmented Reality, 3D Modelling, animation and rendering	4
Total		14

Outcome: Students will be able to produce a variety of projects for experimental animation and game design across a range of media and platforms.

Books Recommended

S.No.	Name of Authors / Books / Publishers	Year
1	Elemental Magic: The Art of Special Effects Animation by Joseph Gilland	2009
2	Dream Worlds by Hans Bacher	2007
3	The Gamer's Brain: How Neuroscience and UX Can Impact Video Game Design by Celia Hodent	2017

Subject Code: DD603

Contact Hours:

Examination Duration (Hrs)

Relative Weight: CWS-0 STS-30

Credit: 4

Semester: 3

Prerequisite: NIL

Course Title: Design Project 3

L: 0 T: 0 S: 0

Theory: 0 hrs Studio: 2

MTE-20 ETE-0 STE-50

Aim: To provide students with an understanding of using Design Research Methods and Explorative Techniques to focus on the problem-solving process.

Outcome: Students will apply, learn and appreciate the importance of research methods and exploration techniques in order to solve the given design problem in an appropriate way.

Books Recommended

S. No.	Name of Authors / Books / Publishers	Year
1	Designing Brand Identity by Alina Wheeler	2017
2	Show Your Work! By Austin Kleon	2014
3	How to Be a Graphic Designer without Losing Your Soul by Adrian Shaughnessy	2010
4	Reportage Illustration: Visual Journalism by Gary Embury and Mario Minichiello	2018

Subject Code: DD 605

Contact Hours:

Examination Duration (Hrs)

Relative Weight: CWS-0 STS-30

Credit: 4

Pre Requisite: NIL

Course Title: Internship

L: 0 T: 0 S: 0

Theory: 0 hrs

MTE-20

Studio: 0hrs

ETE-0

STE-50

Aim: Students will be able to develop an understanding about how the industry works and apply the same in enhancing their portfolio.

Outcome: Students will get a know-how of how the Industry works and will be able to apply that experience into their work.

Subject Code: DD 607

Contact Hours:

Examination Duration (Hrs)

Relative Weight: CWS-0

Credit: 2

Pre Requisite: NIL

Course Title: Design Research Seminar

L: 0 T: 0 S: 0

Theory: 0 hrs Studio: 0hrs

STS-30 MTE-20 ETE-0

STE-50

Aim: Students to present the work done in the Internship Program in the form of a seminar or student may also write Research Papers to be Presented in Conferences etc.

Outcome: Students will be able to Present/ Pitch his or her idea to the market / jury. They will also develop holistic research aptitude in preparation of this seminar.

Visual Communication

Semester IV

Subject Code: DD 602

Contact Hours:

Examination Duration (Hrs)

Relative Weight: CWS-0

Credit: 20

Pre Requisite: NIL

Course Title: Sponsored/ Self Sponsored Project

L: 0 T: 0 S: 0

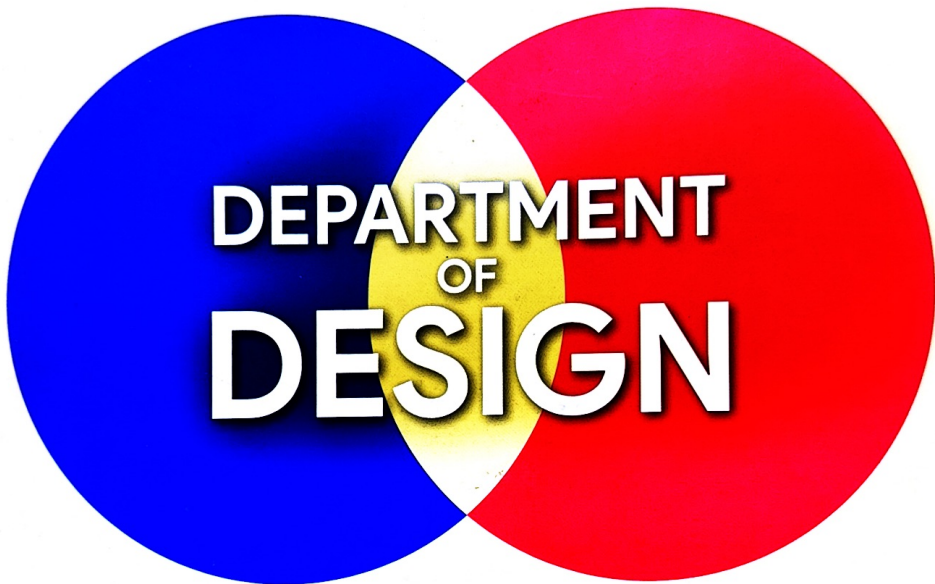
Theory: 0 hrs Studio: 0 hrs

STS-30 MTE-20 ETE-0

STE-50

Aim: Students to work on industry or self-sponsored project. Students willing to work on their own enterprise for the realization into a start-up is also encouraged.

Outcome: Students will be able to acquire skills, knowledge and experience needed for excelling in their respective fields.



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(Formerly Delhi College of Engineering)
Govt. of NCT of Delhi

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