

**DEPARTMENT OF DESIGN  
INDIAN INSTITUTE OF TECHNOLOGY ROORKEE**

Program Code : **XXX M.Des. (Industrial Design)**  
 Department : **Department of Design**  
 Year : **I**  
 Model : **2**

Teaching Scheme					Contact Hours/Week			Exam Duration	
S.No.	Subject Code	Course Title	Subject Area	Credits	L	T	P	Theory	Practical
<b>Semester-I (Autumn)</b>									
1.	DEC-501	Introduction to Design and Prototyping**	PCC	Audit	-	-	-	-	-
2.	DEC-503	Design Methodology	PCC	3	2	0	2	2	0
3.	DEC-505	Design Thinking	PCC	3	1	0	4	2	0
4.	DEC-507	Elements and Principles of Visual Design	PCC	3	2	0	2	2	0
5.	DEC-509	Human Factor Design	PCC	3	1	2	0	2	0
6.	DEC-511	Materials and Manufacturing	PCC	2	1	0	2	2	0
7.	DEC-513	User Experience Design	PCC	2	1	0	2	2	0
8.		Social Science Course	SSC	2	-	-	-	-	-
		<b>Total</b>		<b>18</b>					
<b>**This is a foundation course (L=15; T=5; P=10) will be conducted during the first two weekends after the commencement of classes to give orientation of Design course.</b>									
<b>Semester-II (Spring)</b>									
1.		Program Elective-I	PEC	4	-	-	-	-	-
2.		Program Elective-II	PEC	4	-	-	-	-	-
3.		Program Elective-III	PEC	3/4	-	-	-	-	-
4.		Program Elective-IV	PEC	3/4	-	-	-	-	-
5.		Science, Technology, and Advanced Research-tools	STAR	3	-	-	-	-	-
6.	DEC-700	Design Seminar	SEM	2	0	0	4	0	0
		<b>Total</b>		<b>19/21</b>					

**DEPARTMENT OF DESIGN  
INDIAN INSTITUTE OF TECHNOLOGY ROORKEE**

Program Code : **XXX M.Des. (Industrial Design)**  
 Department : **Department of Design**  
 Year : **II**  
 Model : **2**

Teaching Scheme					Contact Hours/Week			Exam Duration	
S.No.	Subject Code	Course Title	Subject Area	Credits	L	T	P	Theory	Practical
<b>Semester-I (Autumn)</b>									
1.	DEC-691	Internship Social Activity <sup>\$\$</sup>	ISA	5	-	-	-	-	-
2.	DEC-701A	Thesis Stage-I	THESIS	10	-	-	-	-	-
		<b>Total</b>		<b>15</b>					
<b>\$\$Evaluation scheme: (Industry: 40 + Institute: 60) Internship will be completed during summer break.</b>									
<b>Semester-II (Spring)</b>									
1.	DEC-701B	Thesis Stage-II	THESIS	14	-	-	-	-	-
		<b>Total</b>		<b>14</b>					

<b>Summary</b>				
Semester	1	2	3	4
<b>Semester-wise Total Credits</b>	18	19/21	15	14
<b>Total Credits</b>	<b>66/68</b>			

**M.Des. (Industrial Design)**

**Program Elective Courses**

Teaching Scheme					Contact Hours/Week			Exam Duration	
S.No.	Subject Code	Course Title	Subject Area	Credits	L	T	P	Theory	Practical
1.	DEL-501	Form Design	PEC	4	2	1	2	3	0
2.	DEL-502	Sensors, Actuators and IOT	PEC	4	2	1	2	3	0
3.	DEL-503	Computer Aided Design	PEC	4	2	1	2	3	0
4.	DEL-504	Rapid Prototyping	PEC	4	3	0	2	3	0
5.	DEL-505	Artificial Intelligence and Data Science	PEC	4	3	1	0	3	0
6.	DEL-506	Interaction Design	PEC	4	2	1	2	3	0
7.	DEL-507	Research Methods in Design	PEC	4	3	1	0	3	0
8.	DEL-508	Inter-Disciplinary Design	PEC	4	3	0	2/2	3	0
9.	DEL-509	Design for Sustainability	PEC	3	2	1	0	2	0
10.	DEL-510	CAE in Product Design	PEC	3	3	0	0	3	0
11.	DEL-511	Reverse Engineering	PEC	3	2	0	2	2	0
12.	DEL-512	Product Planning and Marketing	PEC	3	3	0	0	3	0
13.	DEL-513	Business and Service Innovation	PEC	3	3	0	0	3	0
14.	DEL-514	Business Valuation	PEC	3	2	1	0	2	0
15.	DEL-515	Intellectual Property Management	PEC	3	2	1	0	2	0
16.	DEL-516	Legal Standards/IPR	PEC	3	3	0	0	3	0
17.	DEL-517	Systems Thinking	PEC	3	3	0	0	3	0
18.	DEL-518	Mobility Design	PEC	3	3	0	0	3	0
19.	DEL-519	Service Design	PEC	3	2	1	0	2	0
20.	DEL-520	Research into Design	PEC	3	2	1	0	2	0
21.	DEL-521	Bio Inspired Design	PEC	3	3	0	0	3	0
22.	DEL-522	Computer Game Design	PEC	3	3	0	0	3	0

**M.Des. (Industrial Design)**

**Program Elective Courses**

Teaching Scheme					Contact Hours/Week			Exam Duration	
S.No.	Subject Code	Course Title	Subject Area	Credits	L	T	P	Theory	Practical
23.	DEL-523	Design for Society	PEC	3	3	0	0	3	0
24.	DEL-524	Graphic Design	PEC	3	2	0	2	2	0
25.	DEL-525	Product Detailing	PEC	3	2	0	2	2	0
26.	DEL-526	Contemporary Visual Design	PEC	3	3	0	0	3	0
27.	DEL-527	Representation Techniques for Animation	PEC	3	3	0	0	3	0
28.	DEL-528	Visual Narrative	PEC	3	3	0	0	3	0
29.	DEL-529	Product Design	PEC	3	3	0	0	3	0
30.	DEL-530	Manufacturing Guidelines for Product Design	PEC	3	3	0	0	3	0
31.	DEL-531	Design for Social Inclusion	PEC	3	2	0	2/2	2	0
32.	DEL-532	Introduction to Emotional Design	PEC	3	2	1	0	2	0
33.	DEL-533	Technology Management	PEC	2	2	0	0	2	0
34.	DEL-534	Product Innovation Management	PEC	2	2	0	0	2	0

**Science, Technology, and Advanced Research-tools Basket**

Teaching Scheme					Contact Hours/Week			Exam Duration	
S.No.	Subject Code	Course Title	Subject Area	Credits	L	T	P	Theory	Practical
1.	DET-501	User Experience and Interface Design	STAR	3	2	0	2	2	0