M.Des. (INDUSTRIAL DESIGN)
Curriculum Review Concept Note

Background:

The M.Des (Industrial Design) was started at IIT Delhi, as a part of Product Development Programme, supported by the GOI, and approved by the BOG as a Thrust Area, with a curriculum to prepare Industrial Product Designers for Indian Manufacturing Industry. One review was held since then to strengthen the programme.

Presently there are four good programmes specializing in Industrial Product Design, running in the country at : 1. IIT BOMBAY, 2. IIT DELHI, 3. NID Ahmedabad, and 4. SPA New Delhi. All other newer programmes started in good institutions have different specialization eg. Visual Communication, Human Computer Interface, Film & Animation, or are of generic nature.

On 15th August 2014 speaking from The Red Fort, The Prime Minister Mr. Narendra Modi gave a call to the whole world "COME, MAKE IN INDIA", declaring India as a Manufacturing hub. So it is necessary for programmes like ours to consolidate their strengths and to strengthen them further.

The strength of our programme has been the strong emphasis on preparing Working Prototypes of the products developed in various projects specially in the Major Project, which was possible because of high quality intake in the program of 70% B.E.-B.Tech. Engineers and 30% B.Arch. Architects.

Objectives of the review:
1. To review the M.Des (Industrial Design) conceived under PRODUCT DEVELOPMENT PROGRAMME.
2. To revise curriculum, as per the aspirations of the Prime Minister, the country, and the global society.
3. To Bring down the Course Credits from existing 93.5 Credits to 45, as proposed by the Dean PGS.

Methodology:
- To bench-mark in line with the existing institutions in India and abroad.
- To understand aspirations of the stakeholders to carry out curriculum modifications.
- Data from Benchmark institutions - IITB, IITD, NID-A, SANSKRITI, MIT, RCA and other good institutions.
- Recommendations of Core Faculty.
- Recommendations of Other expert members invited from amongst IIT faculty.
- Alumni and student opinions.
- Output of Vision Development Workshop.
- Output of Curriculum Review meeting held .
- Detailed deliberations amongst Core Industrial Design Faculty.

Principles Underlying The Revised Curriculum
1. "Make In India" call given by PM Mr Modi, declaring India as a MANUFACTURING HUB.
2. Technical Strength and Engineering Environment of the Institute
3. Our past success story in Industrial Manufacturing sector – 100% employment.
4. Understanding Indian Values, social issues and aspirations for Product Design
5. General problem solving skills of the students, Keeping an eye on newer products emerging in the market.

Steps - How Credits Could Be Reduced:

Perhaps it was possible to assign most of the practical work as a home-work or as self study.

- Firstly 7 essential core subjects were identified.
  Communication Presentation Skills, Product form & Aesthetics, Design Methods, Applied Ergonomis, Computer Aided Design, Framework of Design, Product Interface Design.
- Out of these, Credits of 2 core subjects could be reduced.
  Framework of Design, Product Interface Design
- It was felt that 2 subjects can be combined as one single subject
  Prototype & Die Development; Advanced Materials Processes and Finishes
- 2 non-essential Subjects could be kept as Electives
  Product system services & Environment; Computer Aided Industrial Design
- 2 More slots created for Electives
- 3 Essential Projects Retained, and their credits reduced.
  Project-1 (3 Credits), Project-2 Credits) & Project-3 (9 Credits)
- 2 Training Courses (Winter & Summer) non graded core, is introduced.
- 3 Seminar Courses were Removed
  Seminar-1, seminar-2, Invited professional Seminar
- 3 Courses were Removed
  Engg. Functions Materials & Processes; Adv. Form Design, Placement & Design Degree Show.
- 13 Electives were identified including 3 Slots for Visiting Experts
- All of these courses were drafted for essential modernization of the contents and title change.

In this way a complete curricula of 54 Credits was created, out of which 3 credits (1 Credit For Winter Training & 2 Credits for Summer Training) will be treated as non-graded and Audit courses.

The new curricula is given below.

<div align="center">**PROPOSED REVISED CURRICULUM for M.DES INDUSTRIAL DESIGN**</div>

CREDIT REQUIREMENTS

	Credits				
	Program Core (PC)	**Program Elective (PE)**	**Open Elective (OE)**	**Training**	**Total Credits**
1st Semester	13	-	-	-	13
2nd Semester	11	3	-	-	14
3rd Semester	6	6	-	-	12
4th Semester	9	-	3	-	12
TOTAL	**39**	**9**	**3**	**-**	**51**

CURRICULUM LAYOUT

Semester	Program Core	Program Elective	Other Courses
1	DIL 711. 2-0-0 (2) DIP 721. 1-0-4 (3) DIP 731. 1-0-4 (3) DIP 741 1-0-2 (2) DIL 751 2-0-2 (3)		**Training course:** **DIR 761** **Non Graded Core** **(S/Z Grade)**
2	DIP 712. 1-0-4 (3) DIP 722 1-0-2 (2) DIL 732. 2-0-2 (3) DID 792. 0-0-6 (3)	**PE-1: 3 credits**	**Training course:** **DIR 801** **Non Graded Core** **(S/Z Grade)** -
3	DID 891 0-0-12 (6)	**PE-2: 3 credits** **PE-3: 3 credits**	-
4	DID 892 0-0-18 (9)	**OE-3: 3 credits**	-

LIST OF CORE COURSES

S. No.	Course No.	Title	L-T-P	Credits
1	DIL 711	Framework of Design	2-0-0	2
2	DIP 721	Design and Innovation Methods	1-0-4	3
3	DIP 731	Communication and presentation skills	1-0-4	3
4	DIP 741	Product Interface & Design	1-0-2	2
5	DIL 751.	Form and Aesthetics	2-0-2	3
3	DIP 712	Computer Aided Product Detailing	1-0-4	3
7	DIP 722	Applied Ergonomics	1-0-2	2
8	DIL 732	Adv Mat Processes & Die Design	2-0-2	3
9	DID 792	Design Project1	0-0-6	3
10	DID 891	Design Project -2	0-0-12	6
11	DID 892	Industry/ Research Design Project.	0-0-18	9
Total			**11-0-56**	**39**

LIST OF TRAINING COURSES OF THIS PROGRAMME

S. No.	Course No.	Title	L-T-P	Credits
1	DIR 761.	Social Immersion :	0-0-2	S/Z Grade
2	DIR 801	Summer Internship:	0-0-4	S/Z Grade
Total			0-0-6	

LIST OF PROGRAMME ELECTIVES OF THIS PROGRAMME

S. No.	Course No.	Title	L-T-P	Credits
1	DIL 782	Design for Usability	2-0-2	3
2	DIR 832	Design for User Experience	3-0-0	3
3	DIR 862	Design in Indian Context	3-0-0	3
4	DIR 852	Strategic Design Management	2-0-2	3
5	DIR 822	Design for Sustainability	2-0-2	3
6	DIR 772	Transportation Design	2-0-2	3
7	DIV 820	Special Topics/Modules in Design	1-0-0	1
8	DIV 810	Special Topics in Design 1	3-0-0	3
9	DIV 820	Special Topics in Design 2	3-0-0	3
10	DIL 841	Design Management and Professional Practice	3-0-0	3
11	DIP 712	Exhibitions and Environmental Design	2-0-2	3
12	DIR 812	Media Studies	2-0-2	3
13	DIR 762	Vehicle Design	2-0-2	3

Semester I

S. No.	Course Number	Course Name	Type	L-T-P	Credits
1	DIL 711	Framework of Design	PC	2-0-0	2
2	DIP 721	Design and Innovation Methods	PC	1-0-4	3
3	DIP 731	Communication and presentation skills	PC	1-0-4	3
4	DIP 741	Product Interface & Design	PC	1-0-2	2
5	DIL 751.	Form and Aesthetics	PC	2-0-2	3
5	DIR 761.	Training Social Immersion :**3 Weeks in Winters**	PC	0-0-2	S/Z Grade
Semester Total				**7-0-14**	**13**

Semester II

S. No.	Course Number	Course Name	Type	L-T-P	Credits
1	DIP 712	Computer Aided Product Detailing	PC	1-0-4	3
2	DIP 722	Applied Ergonomics	PC	1-0-2	2
3	DIL 732	Adv Mat Processes & Die Design	PC	2-0-2	3
4	DID 792	Design Project1	PC	0-0-6	3
5	DIR 801	Training Summer Internship: **8 Weeks in Summers**	PC	0-0-4	S/Z Grade
Core Total				**4-0-18**	**11**
5	DIR 762	Vehicle Design	PE	2-0-2	3
6	DIR 772	Transportation Design	PE	2-0-2	3
7	DIL 782	Design for Usability	PE	2-0-2	3
Electives					**3**
Semester Total					**14**

Semester III

S. No.	Course Number	Course Name	Type	L-T-P	Credits
1	DID 891	Design Project -2	PC	0-0-12	6
Core Total				**0-0-12**	**6**
2	DIR 812	Media Studies	PE	2-0-2	3
3	DIR 822	Design for Sustainability	PE	2-0-2	3
4	DIR 832	Design for User Experience	PE	3-0-0	3
5	DIV 820	Special Topics/Modules in Design	PE	1-0-0	1
6	DIV 810	Special Topics in Design 1	PE	3-0-0	3
7	DIV 820	Special Topics in Design 2	PE	3-0-0	3
8	DIP 712	Exhibitions and Environmental Design	PE	2-0-2	3
9	DIL 842	Design Management and Professional Practice	PE	3-0-0	3
10	DIR 852	Strategic Design Management	PE	2-0-2	3
11	DIR 862	Design in Indian Context	PE	3-0-0	3
Electives					**6**
Semester Total					**12**

Semester IV

S. No.	Course Number	Course Name	Type	L-T-P	Credits
1	DID 892	Industry/ Research Design Project.	PC	0-0-18	9
Core Total				**0-0-18**	**9**
2		OPEN ELECTIVE	OE		3
Electives					**3**
Semester Total					**12**