



**DELHI SKILL AND
ENTREPRENEURSHIP UNIVERSITY**

Diploma in Mechanical Engineering

Syllabus Document



EFFECTIVE FROM ACADEMIC YEAR 2021-22

Program Vision

The Mechanical Engineering Department of DSEU will mould the students into technically sound and skilled professionals with leadership qualities for serving the society with international touch and entrepreneurial abilities.

Program Outcome

a) Technical Knowledge/Skills

- Able to read blueprint, design and draft drawings.
- Knowledge of commonly used materials and selection
- Knowledge of machine tools and manufacturing processes selection
- Knowledge about components of the mechanical section (boiler, firing floor, turbine section etc.)
- Thorough knowledge of basic thermodynamics.
- Basic workshop skills and its operations.
- Knowledge of control systems and instrumentation
- Computing skills and knowledge of basic computer programming languages
- Basic Technical Knowledge of all core mechanical engineering subjects

b) Software Skill and Project Skills

Auto CAD

c) Personality Traits and Ethics:

- Analytical thinking and problem-solving skills.
- Presentation skills and report writing.
- Conflict management and interpersonal skills
- Work ethics
- Leadership and Strategic planning
- Punctuality and Flexibility
- Team playing, ethics and loyalty
- Adaptability and Self-awareness

d) Soft Skills:

- Problem solving skills
- Communication skills
- Good listening Writing skills
- Presentation skills

Credit Scheme

Semester I						
SI No.	Subject Code	Course Titles	Hours/week			Total Credits
			L	T	P	
1	ME-HS101	Face The World Skills (FTW) - I	-	-	-	3
2	ME-HS102	English Communication I	2	0	0	2
3	ME-HS103	Sports and Yoga	0	0	2	1
4	ME-FC101	Applied Mathematics - I	3	1	0	4
5	ME-FC102	Basic Sciences*	4	0	2	5
6	ME-FC103	Basic Engineering Graphics	0	0	6	3
7	ME-FC104	Basic Engineering Workshop Technology	1	0	4	3
TOTAL			10	1	14	21

*Basic Sciences includes Applied Physics and Applied Chemistry of 2.5 credits each

Semester II						
SI No.	Subject Code	Course Titles	Hours/week			Credits
			L	T	P	
1	ME-HS201	Face The World Skills - II	-	-	-	1
2	ME-HS202	English Communication-II	0	0	2	1
3	ME-HS203	Environmental Studies	-	-	-	1
4	ME-FC201	Applied Mathematics-II	3	1	0	4
5	ME-PC202	Engineering Mechanics	3	0	2	4
6	ME-PC203	Engineering Graphics II	2	0	6	5
7	ME-PC204	Workshop Technology	2	0	6	5
TOTAL			1	1	16	21

Semester III						
Sl No.	Subject Code	Course Titles	Hours/week			Total Credits
			L	T	P	
1	ME-PC301	Engineering Materials and Metallurgy	3	0	2	4
2	ME-PC302	Thermal Engineering-1	3	0	2	4
3	ME-PC303	Manufacturing Technology	2	0	4	4
4	ME-PC304	Machine Drawing -1 and CAD Drafting	1	0	4	3
5	ME-PC305	Fundamentals of Mechatronics	2	0	2	3
6	ME-PR301	Academic and Research Report Writing	1	0	0	1
7	ME-HS301	Face the World Skills - III	-	-	-	1
8	ME-HS302	English Communication -III	0	0	2	1
9	ME-HS303	Indian Constitution	-	-	-	1
TOTAL			12	0	16	22

Semester IV						
Sl No.	Subject Code	Course Titles	Hours/week			Credits
			L	T	P	
1	ME-PC401	Strength of Materials	3	0	2	4
2	ME-PC402	Fluid Mechanics and Fluid Machines	3	0	2	4
3	ME-PC403	Thermal Engineering-II	3	0	2	4
4	ME-PC404	Machine Drawing-II and CAD Drafting	1	0	4	3
5	ME-PC405	Conventional Machining Processes	2	0	4	4
6	ME-HS401	Face the World Skills -IV	-	-	-	1
7	ME-HS402	English Communication - IV	0	0	2	1
8	ME-HS403	Human Values	-	-	-	1
TOTAL			12	0	16	22

Semester V						
SI No.	Subject Code	Course Titles	Hours/week			Total Credits
			L	T	P	
1	ME-PC501	Theory of Machine	3	1	0	4
2	ME-PC502	Non-Conventional & Advanced Machining processes	3	0	0	3
3	ME-PC504	CNC Machines and Automation	3	0	4	5
4	ME-PC505	Industrial Engineering	3	0	0	3
5	ME-SI501	Industrial Training/Summer Internship	0	0	0	2
6	ME-OC501	MOOC	0	0	0	2
7	ME-HS501	Face the World Skills- V	-	-	-	1
8	ME-HS502	English Communication - V	0	0	2	1
TOTAL			12	1	6	21

Semester VI						
SI No.	Subject Code	Course Titles	Hours/week			Credits
			L	T	P	
1	ME-PE 601/ ME-PE 611	Elective	3	0	0	3
2	ME-PC601	Machine Design	3	1	0	4
3	ME-PC602/ME-PC611	Refrigeration and air conditioning	3	0	2	4
4	ME-PC603/ME-PC612	Metrology and Instrumentation	2	0	2	3
5	ME-PR601	Industry Based Major Project	0	0	12	6
6	ME-HS601	Face the World Skills – VI	-	-	-	1
7	ME-HS602	English Communication - VI	0	0	2	1
TOTAL			11	1	18	22

***ELECTIVES:**

1. Automobile Engineering
2. Latest development on emission control
3. Power Plant Engineering
4. Non-Conventional Energy System
5. Mechanisms and Robot Kinematics

Note - The syllabus for Applied Mathematics, Basic Sciences, Basic Engineering Workshop Technology and Basic Engineering Graphics is provided separately.

The syllabus of English Communication, Face the World Skills, EVS, Sports & Yoga, Indian Constitution and Human Values are common across all the diploma programs and are given separately.