

Revised structure and syllabus of Part time Mechanical Engineering Department as CBCS (Revised) for implementation from forthcoming Academic Year 2022-23

**Government College of Engineering, Aurangabad
(An Autonomous Institute)**

Teaching and Evaluation Scheme from year 2022-23
Second Year B. Tech. (Part Time) Program in Mechanical
Engineering
Semester III


Sr No	Category	Course Code	Course Title	Hours per week			Credits	Continuous Evaluation in terms of Marks				Total
				L	T	P		ISE I	ISE II	ISE III	ESE	
1.	BSC	MABS2001	Engineering Mathematics III	3	0	0	3	15	15	10	60	100
2.	PCC-I	MEPC2001	Engineering Thermodynamics	3	0	0	3	15	15	10	60	100
3.	PCC-III	MEPC2002	Manufacturing Processes	3	0	0	3	15	15	10	60	100
4.	PCC-I LC	MEPC2005	Lab- Engineering Thermodynamics	0	0	2	1	25			25	50
5.	PCC-III LC	MEPC2006	Lab-Manufacturing Processes (Workshop Practice II)	0	0	2	1	25			25	50
6.	OEC-I		Open Elective-I	3	0	0	3	15	15	10	60	100
7.	MC-II	EEMC2009	Environmental Studies	3	0	0	0	15	15	10	60	100
Total				15	0	4	14	125	75	50	350	600
Open Elective-I MEOE0010 Total Quality Management												

XV"BoS Mechanical Engineering Department held on 08/02/2022


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Semester IV

Sr No	Category	Course Code	Course Title	Hours per week			Credits	Continuous Evaluation in terms of Marks				Total
				L	T	P		ISE I	ISE II	ISE III	ESE	
1.	PCC-IV	MEPC2003	Mechanisms of Machine	3	0	0	3	15	15	10	60	100
2.	ESC	MEES2004	Materials Science and Metallurgy	3	0	0	3	15	15	10	60	100
3.	PCC-IV LC	MEPC2007	Lab- Mechanisms of Machine	0	0	2	1	25			25	50
4.	ESC - LC	MEES2008	Lab - Materials Science and Metallurgy	0	0	2	1	25			25	50
5.	PEC-I		Professional Elective-I	3	0	0	3	15	15	10	60	100
6.	PEC-I	MEPE2020	Lab- Professional Elective- I (Workshop Practice III)	0	0	2	1	25			25	50
7.	OEC-II		Open Elective II	3	0	0	3	15	15	10	60	100
Total				12	0	6	15	135	60	40	315	550
Professional Elective-I MEPE2014 Machine Tools MEPE2015 Production Processes				Open Elective II MEOE1020 Automation Engineering								


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Semester V

Sr No	Category	Course Code	Course Title	Hours per week			Credits	Continuous Evaluation in terms of Marks				Total
				L	T	P		ISE I	ISE II	ISE III	ESE	
1.	PCC-V	MEPC2010	Applied Thermodynamics	3	0	0	3	15	15	10	60	100
2.	PCC-II	MEPC2011	Machine Drawing	3	0	0	3	15	15	10	60	100
3.	PCC-VII	MEPC2012	Strength of Materials	2	0	0	2	10	10	5	25	50
4.	PCC-VIII	MEPC2013	Metrology & Quality Control	3	0	0	3	15	15	10	60	100
5.	PCC-VLC	MEPC2016	Lab- Applied Thermodynamics	0	0	2	1	25			25	50
6.	PCC-IILC	MEPC2017	Lab-Machine Drawing	0	0	2	1	25			25	50
7.	PCC-VII-LC	MEPC2018	Lab – Strength of Materials	0	0	2	1	25			25	50
8.	PCC-VIII LC	MEPC2019	Lab- Metrology & Quality Control	0	0	2	1	25			25	50
Total				11	0	8	15	155	55	35	305	550

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Government College of Engineering, Aurangabad
(An Autonomous Institute)

Teaching and Evaluation Scheme from year 2023-25
Third Year B. Tech. (Part Time) Program in Mechanical Engineering

Semester VI

SrNo	Category	Course Code	Course Title	Hours per week			Credits	Continuous Evaluation in terms of Marks				Total
				L	T	P		ISE I	ISE II	ISE III	ESE	
1.	PCC-IX	MEPC3001	Machine Design - I	3	0	0	3	15	15	10	60	100
2.	PEC-II		Professional Elective II	3	0	0	3	15	15	10	60	100
3.	PCC-X	MEPC3004	CAD/CAM	3	0	0	3	15	15	10	60	100
4.	PCC-IX LC	MEPC3006	Lab-Machine Design- I	0	0	2	1	25			25	50
5.	PEC-II LC		Lab- Professional Elective II	0	0	2	1	25			25	50
6.	PCC-X LC	MEPC3009	Lab-CAD/CAM	0	0	2	1	25			25	50
7.	OEC-III		Open Elective III	3	0	0	3	15	15	10	60	100
8.	PROJ	MEPR3011	Industrial Training*	-	-	2	1	25			25	50
Total				12	0	6	16	160	60	40	340	600
Professional Elective II MEPE3002 Theory of Machine MEPE3003 Mechanical Measurements MEPE3007 Lab- Theory of Machine MEPE3008 Lab - Mechanical Measurements							Open Elective III MEOE0030 Quality Management Systems MEOE0031 Renewable Energy Sources					

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Semester VII

Sr No	Category	Course Code	Course Title	Hours per week			Credits	Continuous Evaluation in terms of Marks				Total
				L	T	P		ISE I	ISE II	ISE III	ESE	
1.	PCC-XI	MEPC3005	Fluid Mechanics & Hyd. Machines	3	0	0	3	15	15	10	60	100
2.	PCC-XI LC	MEPC3010	Lab- Fluid Mechanics & Hyd. Machines	0	0	2	1	25			25	50
3.	HSMC-II	MEHS0020	Industrial Organization & Management	3	0	0	3	15	15	10	60	100
4.	PEC-IV		Professional Elective IV	2	0	0	2	10	10	5	25	50
5.	PEC-IV LC		Lab- Professional Elective IV	0	0	2	1	25			25	50
6.	HSMC-III	MEHS1030	Engineering Economics and Costing	3	0	0	3	15	15	10	60	100
7.	PROJ	MEPR3024	CAME project	0	0	2	1	25			25	50
Total				11	0	6	14	135	55	35	280	500
Professional Elective IV MEPE3016 Tribology MEPE3017 Energy Audit and Management MEPE3022 Lab - Tribology MEPE3023 Lab - Energy Audit and Management												

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Semester VIII

Sr No	Category	Course Code	Course Title	Hours per week			Credits	Continuous Evaluation in terms of Marks				Total
				L	T	P		ISE I	ISE II	ISE III	ESE	
1.	PCC-XII	MEPC3012	IC Engines	3	0	0	3	15	15	10	60	100
2.	PEC-III		Professional Elective III	3	0	0	3	15	15	10	60	100
3.	PCC-XIII	MEPC3015	Heat & Mass Transfer	3	0	0	3	15	15	10	60	100
4.	PCC-XII LC	MEPC3018	Lab- IC Engines	0	0	2	1	25			25	50
5.	PEC-III LC		Lab-Professional Elective III	0	0	2	1	25			25	50
6.	PCC-XIIILC	MEPC3021	Lab-Heat & Mass Transfer	0	0	2	1	25			25	50
7.	OEC-IV		Open Elective IV	3	0	0	3	15	15	10	60	100
Total				12	0	6	15	135	60	40	315	550
Professional Elective III MEPE3013 Power plant Engineering MEPE3014 Machine Design - II MEPE3019 Lab- Power plant Engineering MEPE3020 Lab - Machine Design II				Open Elective IV MEOE1040 Entrepreneurship Development MEOE1041 Operation Research								


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**Government College of Engineering,
Aurangabad(An Autonomous Institute)**
Teaching and Evaluation Schemefrom year 2025-27
**Final Year B. Tech. (Part Time) Program in Mechanical
Engineering**

Semester IX

SN	Category	CourseCode	Course Title	Hours per week			Credits	Continuous Evaluation in terms of Marks				Total
				L	T	P		ISE I	ISE II	ISE III	ESE	
1.	PCC-XIII	MEPC4001	Tool Design	3	0	0	3	15	15	10	60	100
2.	PCC-XV	MEPC4002	Automobile Engineering	3	0	0	3	15	15	10	60	100
3.	PCC-XVI	MEPC4003	Mechatronics and control system	3	0	0	3	15	15	10	60	100
4.	PCC XIII LC	MEPC4007	Lab-Tool Design	0	0	2	1	25			25	50
5.	PCC XV LC	MEPC4018	Lab- Automobile Engineering	0	0	2	1	25			25	50
6.	PCC XVI LC	MEPC4009	Lab- Mechatronics and control system	0	0	2	1	25			25	50
Total				9	0	6	12	120	45	30	255	450

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Semester X

SN	Category	Course Code	Course Title	Hours per week			Credits	Continuous Evaluation in terms of Marks				Total
				L	T	P		ISE I	ISE II	ISE III	ESE	
1.	PEC-V		Professional Elective V	2	0	0	2	10	10	5	25	50
2.	OEC-V		Open Elective V	3	0	0	3	15	15	10	60	100
3.	PEC VI LC		Lab-Professional Elective V	0	0	2	1	25			25	50
4.	PROJ	MEPR4013	Mini Project	0	0	8	3	50			50	100
5.			Activity - I									
6.			Activity - II									
Total				5	0	10	9	100	25	15	160	300
Professional Elective V MEPE4004 Robotics & Automation MEPE4005 Refrigeration and air Conditioning MEPE4006 Introduction to FEM MEPE4010 Lab - Robotics & Automation MEPE4011 Lab- Refrigeration and air Conditioning MEPE4012 Lab - Introduction to FEM							Open Elective V MEOE0050 Additive Manufacturing					

NPTEL/MOOCs *: -It is mandatory to all students to successfully complete NPTEL/MOOC Course(s) at UG Engineering level (Total of 12 weeks) will be equivalent for one Humanities Course of three credits and submit its certificate to COE through their guide.

- The students have to Register and complete NPTEL/MOOC Course(s) upto VIIth Semester and the assessment will be in VIIIth semester.
- Students must select NPTEL/MOOC course through the list provided by BOS Chairman Mechanical Engineering Department.
- After submission of authentic course certificate, credit of MEHS4016 will be transferred.
- It is compulsory to appear online exam of Swayam/ NPTEL/ MOOCS course under supervision of department otherwise performance of student will not be considered.
- The ESE depends upon the performance and marks obtained in the exams of NPTEL/ MOOC courses and Percentage score obtained by students in will be graded as per autonomy rule with 10% of boost.

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Semester XI

Sr No	Category	Course Code	Course Title	Hours per week			Credits	Continuous Evaluation in terms of Marks				Total
				L	T	P		ISE I	ISE II	ISE III	ESE	
1.	HSMC-IV	MEHS1040	NPTEL/MOOCs	3	0	0	3				100	100
2.	PROJ	MEPR4014	Industrial Training	0	0	16	8	100			100	200
Total				3	0	16	11	100			200	300

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