

MECHANICAL ENGINEERING CURRICULUM – INTAKE 38

LEVEL 01					
SEMESTER 01					
CODE	MODULE	CREDITS			
		Category	GPA	NGPA	MGPA
ME 1103	Workshop Technology	C	3		
ME 1112	Engineering Drawing **	C	2		
CE 1102	Fundamentals of Civil Engineering	C	2		
EE 1102	Fundamentals of Electrical Engineering	C	2		
ET 1102	Basic Electronics	C	2		
MA 1103	Mathematics	C	3		
IT 1012	Basic Computer Programming and networking	C	2		
DL 1131	English: Basic Study Skills (Engineering)	C		1	
MS 1014	Military Studies	C			4
DL1341	Sinhala for Beginners*	E		1	
DL 1351	Tamil for Beginners*				
	Semester Credits		16	2	4
	Total Credits up to Semester 1		16	2	4
Intermediate Term – Humanity Modules					
CODE	MODULE	CREDITS			
		Category	GPA	NGPA	MGPA
EN 20X2	Humanities Elective I	HE I		2	
EN 20X2	Humanities Elective II	HE II		2	
	Semester Credits			4	
	Total Credits up to Intermediate Term		16	6	4
SEMESTER 2					
CODE	MODULE	CREDITS			
		Category	GPA	NGPA	MGPA
ME 1202	Fundamentals of Thermodynamics	C	2		
ME 1212	Engineering Materials	C	2		
ME 1222	Applied Mechanics	C	2		
CE 1222	Structural Mechanics I	C	2		
CE 1232	Fluid Mechanics I	C	2		
EE 1203	Theory of Electricity	C	3		
MA 1203	Calculus	C	3		
DL 2141	English: Advanced Study Skills(Engineering)	C		1	
MS 2024	Military Studies	C			4
MA 1002	Mathematical Software	C	2		
	Semester Credits		18	1	4
	Total Credits up to Semester 2		34	7	8

* To be scheduled at the last 3 weeks of the semester

** Module will be offered in Semester 2 only for Intake 38 due to pandemic situation

Note: Intermediate term will be offered after semester 8 for Intake 38 batch B due to late Admission of students to KDU

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LEVEL 02					
SEMESTER 3					
CODE	MODULE	CREDITS			
		Category	GPA	NGPA	MGPA
ME 2102	Computer Aided Drafting	C	2		
ME 2112	Applied Thermodynamics	C	2		
ME 2123	Manufacturing Systems	C	3		
ME 2132	Dynamics of Mechanical Systems	C	2		
CE 2102	Structural Mechanics II	C	2		
EE 2102	Electrical Machines & Drives I	C	2		
EE 2122	Electrical Measurements & Electronic Instrumentations	C	2		
MA 2103	Advanced Calculus	C	3		
DL 3151	English: Writing & Speaking	C		1	
MS 3032	Strategic & Defence Studies	C			2
MS 3044	Military Studies	C			4
	Semester Credits		18	1	6
	Total Credits up to Semester 3		52	8	14
SEMESTER 4					
CODE	MODULE	CREDITS			
		Category	GPA	NGPA	MGPA
ME 2203	Physical Metallurgy	C	3		
ME 2213	Control Systems Engineering	C	3		
ME 2222	Heat & Mass Transfer	C	2		
ME 2233	Mechanics of Machines	C	3		
MC 2212	Sensors & Actuators	C	2		
MA 2203	Numerical Methods & Complex Variables	C	3		
DL 4161	English: Research Writing Skills	C		1	
MS 4064	Military Studies	C			4
ME 2011	Industrial Visits & Report Writing	C		1	
ME 2022	Finite Element Analysis	C	2		
	Semester Credits		18	2	4
	Total Credits up to Semester 4		70	10	18

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LEVEL 03					
SEMESTER 5					
CODE	MODULE	CREDITS			
		Category	GPA	NGPA	MGPA
ME 3103	Automotive Engineering I	C	3		
ME 3113	Advanced Control Systems	C	3		
ME 3123	Machine Elements in Design	C	3		
ME 3133	Fluid Power Systems	C	3		
CE 3142	Professional Ethics	C	2		
MA 3102	Applied Statistics	C	2		
MF 3122	Principles of Management	C	2		
	Semester Credits		18		
	Total Credits up to Semester 5		88	10	18
SEMESTER 6					
CODE	MODULE	CREDITS			
		Category	GPA	NGPA	MGPA
ME 3202	Ballistic Engineering (only for officer cadets)	C	2		
ME 3212	Entrepreneurship for Engineers (Only for day scholars)				
ME 3223	Automotive Engineering II	C	3		
ME 3233	Energy Technology & Environment	C	3		
ME 3243	Computational Fluid Dynamics	C	3		
ME 3262	Research Methodology	C	2		
MC 3202	Principles of Automation	C	2		
MF 3112	Business Economics & Financial Accounting	C	2		
	Semester Credits		17		
	Total Credits up to Semester 6		105	10	18
INDUSTRIAL TRAINING					
CODE	MODULE	CREDITS			
		Category	GPA	NGPA	MGPA
ME 3016	Industrial Training	C		6	
	Semester Credits			6	
	Total Credits up to Industrial Training		105	16	18

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LEVEL 04					
SEMESTER 7					
CODE	MODULE	CREDITS			
		Category	GPA	NGPA	MGPA
ME 4104	Machine Design	C	4		
ME 4112	Industrial Project Management	C	2		
ME 4122	Solid Mechanics	C	2		
ME 4206	Research Project*	C	*		
ME 4XX2	Technical Elective I	E	2		
MA 4102	Operational Research	C	2		
MF 4112	Human Resource Management & Industrial Relations	C	2		
	Semester Credits		14		
	Total Credits up to Semester 7		119	16	18
<i>* Continued in Semester 8</i>					
SEMESTER 8					
CODE	MODULE	CREDITS			
		Category	GPA	NGPA	MGPA
ME 4206	Research Project	C	6		
ME 4213	Mechatronic Systems	C	3		
ME 4223	Industrial Engineering	C	3		
ME 4XX2	Technical Elective II	E	2		
LW 4252	Commercial & Industrial Law	C	2		
	Semester Credits		16		
	Total Credits up to Semester 8		135	16	
GRAND TOTAL			135	16	18
SEMESTER 9					
CODE	MODULE	CREDITS			
		Category	GPA	NGPA	MGPA
MS 9074	Advanced Military Training	C			15
	Semester Credits				15
GRAND TOTAL			135	16	33

MECHANICAL ENGINEERING CURRICULUM – INTAKE 38

TECHNICAL AND HUMANITIES ELECTIVE SUBJECTS				
CODE	MODULE			
		Category	GPA	NGPA
Humanities Elective I				
EN 2012	Art & Tradition	HE I	2	
EN 2022	Photography			
EN 2032	International Relations			
EN 2072	Western Dancing			
Humanities Elective II				
EN 2042	Human Rights	HE II	2	
EN 2052	History and Development of Engineering			
EN 2062	Psychology for Engineers			
Technical Elective I				
ME 4402	Robotics Technology	TE 1	2	
ME 4412	Energy Conservation			
ME 4452	Advanced Automation			
MC 4142	Computer Integrated Manufacturing			
MR 4162	Naval Architecture & Boat Building I			
Technical Elective II				
ME 4422	Building Energy Systems	TE 2	2	
ME 4432	Advanced Vibration & Dynamics			
ME 4462	Sustainability and Green Technology			
ME 4442	Advanced Automotive Engineering			
MC 4402	Intelligent Systems Control			
MR 4272	Naval Architecture and Boat Building II			