

**LIST OF CERTIFIED MUET PROFESSIONAL CERTIFIED COURSE (MPCC)**

Sr. #	Subject	Credit Hours	Department	Semester
<b>1<sup>ST</sup> TERM CERTIFIED COURSES</b>				
1	Entrepreneurship	2	Industrial engineering and management	1 <sup>st</sup>
2	Organizational Behavior	2		1 <sup>st</sup>
3	Ultrasonic instrumentation and imaging	2	Biomedical engineering	1 <sup>st</sup>
4	Optical communication	2	Telecommunication engineering & Management	1 <sup>st</sup>
5	Wireless communication	2	Telecommunication engineering & Management	1 <sup>st</sup>
6	Natural Gas Processing	2	Chemical	1 <sup>st</sup>
7	Bio-Processing and Food Technology	2		1 <sup>st</sup>
8	Green Manufacturing	2	Manufacturing Engineering	1 <sup>st</sup>
9	Applied Textile Process Engineering	2	Textile Engineering	1 <sup>st</sup>
10	Woven Fabric Engineering	2		1 <sup>st</sup>
11	Textile Composites	2		1 <sup>st</sup>
12	Research & Communication in Construction Management	2	Construction Management	1 <sup>st</sup>
<b>2<sup>ND</sup> TERM CERTIFIED COURSES</b>				
13	Welding and joining process	2	Metallurgy and material engineering	2 <sup>nd</sup>
14	Computer aided mine planning and design	2	Mining	2 <sup>nd</sup>
15	Internet and mobile commerce	2	Communication systems & Networks	2 <sup>nd</sup>
16	Energy management	2	Electrical power engineering	2 <sup>nd</sup>
17	Laser and spectroscopy	2	Biomedical engineering	2 <sup>nd</sup>
18	Mobile computing	2	Software engineering	2 <sup>nd</sup>
19	Telecom laws, policies and regulations	2	Telecommunication engineering & Management	2 <sup>nd</sup>
20	Research methodology and techniques	2	Information technology	2 <sup>nd</sup>
21	Conservation and Preservation of Architectural Heritage	2	Architecture	2 <sup>nd</sup>
22	Advanced Landscape Design	2		2 <sup>nd</sup>
23	Regulatory Consideration in Architectural Applications	2		2 <sup>nd</sup>
<b>3<sup>RD</sup> TERM CERTIFIED COURSES</b>				
24	Health safety and environment	2	Chemical	3 <sup>rd</sup>
25	Energy Management	2		3 <sup>rd</sup>
26	Reservoir engineering management	2	IP&NG engineering	3 <sup>rd</sup>
27	Power system planning and management	2	Electrical power engineering	3 <sup>rd</sup>
28	Mobile application development	2	Information technology	3 <sup>rd</sup>
29	Research Techniques	2	Industrial Engineering	3 <sup>rd</sup>
30	Engineering Economy	2		3 <sup>rd</sup>
31	Rapid Manufacturing Techniques+	2		3 <sup>rd</sup>

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32	Manufacturing Metrology & Precision Engineering	2	Manufacturing Engineering	3 <sup>rd</sup>
33	Automation & Control	2		3 <sup>rd</sup>
34	Corrosion: Prevention and Control	2	Metallurgy & Materials Engineering	3 <sup>rd</sup>
35	Mine Cost Analysis and Control	2	Mining Engineering	3 <sup>rd</sup>
36	Advanced Mineral Processing	2		3 <sup>rd</sup>
37	Clothing Construction Engineering	2	Textile engineering	3 <sup>rd</sup>
38	Knitted Fabric Engineering	2		3 <sup>rd</sup>
39	Textile Standard and Methods	2		3 <sup>rd</sup>
40	Transportation Planning and Policy	2	Geotechnical & Highway Engineering	3 <sup>rd</sup>
41	Knowledge Management	2	Construction Management	3 <sup>rd</sup>

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<b>1<sup>ST</sup> TERM CERTIFIED COURSES</b>				
1	Advanced Architectural Design-I	3	Architecture	1 <sup>st</sup>
2	Green Architectural Concepts & Applications	3		1 <sup>st</sup>
3	Interaction of Social and Built Environment	3		1 <sup>st</sup>
4	Planning Theory	3	City and regional planning	1 <sup>st</sup>
5	Regional Development Planning	3		1 <sup>st</sup>
6	Urban land a real estate management	3		1 <sup>st</sup>
7	Advanced soil mechanics and testing	3	Geotechnical and highway engineering	1 <sup>st</sup>
8	Fluid Flow and Heat Transfer	3	Energy systems engineering	1 <sup>st</sup>
9	Renewable energy systems	3		1 <sup>st</sup>
10	Electricity Transmission, Distribution and Storage	3		1 <sup>st</sup>
11	Energy Transmission Lab-I	3		1 <sup>st</sup>
12	Teaching and researching motivation	3	English linguistics	1 <sup>st</sup>
13	Statistical methods (SM)	3	Science technology and innovation policy (STIP)	1 <sup>st</sup>
14	Organization behavior and leadership	3	Human resource management	1 <sup>st</sup>
15	Research Methodology in Linguistic	3	English Linguistic	1 <sup>st</sup>
16	Applied Linguistics	3		1 <sup>st</sup>
17	Globalization & Spread of English	3		1 <sup>st</sup>
18	Teaching and Researching Motivation	3		1 <sup>st</sup>
19	Specific Computing	3	Applied Mathematics	1 <sup>st</sup>
20	Advanced Differential Equations	3		1 <sup>st</sup>
21	Advanced Linear Algebra	3		1 <sup>st</sup>
22	Advance Transport Phenomena	3	Chemical	1 <sup>st</sup>
23	Combustion and Clean Technology	3		1 <sup>st</sup>
24	Business Forecasting	3	Industrial Engineering	1 <sup>st</sup>
25	Human Resource Management	3		1 <sup>st</sup>
26	Advance Materials Engineering	3	Manufacturing Engineering	1 <sup>st</sup>
27	Advance Manufacturing Process	3		1 <sup>st</sup>
28	Production Engineering & Management	3		1 <sup>st</sup>
29	Advanced Materials	3	Metallurgy & Materials Engineering	1 <sup>st</sup>
30	Extractive Metallurgy	3		1 <sup>st</sup>
31	Modeling and Computational Method	3		1 <sup>st</sup>
32	Rock Mechanics Design	3	Mining Engineering	1 <sup>st</sup>
33	Design and Control of Mine Water	3		1 <sup>st</sup>
34	Advanced Drilling and Blasting	3		1 <sup>st</sup>
35	Advanced Fiber Science	3	Textile Engineering	1 <sup>st</sup>
36	Yarn Engineering	3		1 <sup>st</sup>
37	Computer Method in Civil Engineering	3	Civil Engineering	1 <sup>st</sup>
38	Advanced Concrete Technology	3		1 <sup>st</sup>
39	Highway Materials	3		1 <sup>st</sup>
40	Advanced Soil Mechanics	3		1 <sup>st</sup>
41	Advanced Soil Mechanics and Testing	3		1 <sup>st</sup>
42	Pavement Materials Engineering	3	Geotechnical & Highway Engineering	1 <sup>st</sup>
43	Ground Improvement Techniques	3		1 <sup>st</sup>
44	Geometric Design of Highways	3		1 <sup>st</sup>

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45	Computer Applications in Structural Engineering	3	Structural Engineering	1 <sup>st</sup>
46	Advanced Concrete Technology	3		1 <sup>st</sup>
47	Advanced Reinforced Concrete	3		1 <sup>st</sup>
48	Advanced Structural Analysis	3		1 <sup>st</sup>
49	Advanced Construction Project Management	3	Construction Management	1 <sup>st</sup>
50	Quality Management & Construction Performance	3		1 <sup>st</sup>
51	Construction and Building Economics	3		1 <sup>st</sup>
<b>2<sup>ND</sup> TERM CERTIFIED COURSES</b>				
52	Advanced architectural Design-II	3	Architecture	2 <sup>nd</sup>
53	Process simulation modeling and particle dynamics	3	Chemical	2 <sup>nd</sup>
54	Engineering contracts and procurement methods	3	Construction management	2 <sup>nd</sup>
55	Energy systems modeling and simulation	3	Energy systems engineering	2 <sup>nd</sup>
56	Automation and textile process control	3	Textile engineering	2 <sup>nd</sup>
57	Computational intelligence	3	Mechatronics	2 <sup>nd</sup>
58	Radiography and computed tomography	3	Biomedical engineering	2 <sup>nd</sup>
59	Software quality and testing	3	Software engineering	2 <sup>nd</sup>
60	Advanced Research Methods (ARM)	3	Science technology and innovation policy (STIP)	2 <sup>nd</sup>
61	Entrepreneurship (ENTER)	3	Technology and innovation management (TIM)	2 <sup>nd</sup>
62	Language Assessment	3	English Linguistic	2 <sup>nd</sup>
63	Teaching and Learning English in Large Classes	3		2 <sup>nd</sup>
64	Computational Linguistics	3		2 <sup>nd</sup>
<b>3<sup>RD</sup> TERM CERTIFIED COURSES</b>				
65	Advanced Power Generation Systems	3	Energy systems engineering	3 <sup>rd</sup>
66	Energy Economics and Management	3		3 <sup>rd</sup>
67	Energy systems for building	3		3 <sup>rd</sup>
68	Implementation of computer integrated manufacturing-3	3	Industrial engineering and management	3 <sup>rd</sup>
69	Quality Control & Reliability	3	Manufacturing engineering	3 <sup>rd</sup>
70	Modeling and simulation	3	Applied mathematics	3 <sup>rd</sup>
71	Finite Element Analysis	3		3 <sup>rd</sup>
72	IC design and manufacturing	3	Electronic system engineering	3 <sup>rd</sup>
73	Science technology and innovation policy (STIP)	3	Science technology and innovation policy (STIP)	3 <sup>rd</sup>
74	Writing and communicating in public policy (WCPP)	3	Public policy	3 <sup>rd</sup>
75	Strategic human resource management	3	Human resource management	3 <sup>rd</sup>
76	Procurement and contract management	3	Project management	3 <sup>rd</sup>
77	Project monitoring and evolution	3	Project management	3 <sup>rd</sup>
78	Language Assessment	3	English Linguistic	3 <sup>rd</sup>
79	Teaching and Learning English in Large Classes	3		3 <sup>rd</sup>
80	Computational Linguistics	3		3 <sup>rd</sup>
81	Advanced Separation Processes and Membrane Technology	3	Chemical	3 <sup>rd</sup>
82	Reactor Design and Kinetics	3		3 <sup>rd</sup>

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83	Advanced Characterization Techniques	3	Metallurgy & Materials Engineering	3 <sup>rd</sup>
84	Manufacturing Technology	3		3 <sup>rd</sup>
85	Modern Mine Management	3	Mining	3 <sup>rd</sup>
86	Advanced Irrigation Engineering	3	Civil Engineering	3 <sup>rd</sup>
87	Advanced Foundation Engineering	3		3 <sup>rd</sup>
88	Pre-Stressed Concrete	3		3 <sup>rd</sup>
89	Pavement Maintenance & Rehabilitation	3	Geotechnical & Highway Engineering	3 <sup>rd</sup>
90	Traffic Engineering	3		3 <sup>rd</sup>
91	Analysis and Design of Bridges	3	Structural Engineering	3 <sup>rd</sup>
92	Design of Tall Buildings	3		3 <sup>rd</sup>
93	Seismic Analysis and Design	3		3 <sup>rd</sup>
94	Construction Risk Management	3	Construction management	3 <sup>rd</sup>
95	Construction Equipment & Management	3		3 <sup>rd</sup>
96	Comparative Urban Planning	3	City & Regional Planning	3 <sup>rd</sup>
97	Infrastructure Planning	3		3 <sup>rd</sup>
98	Project Planning and Implementation	3		3 <sup>rd</sup>
99	Architectural Construction, Services & Technology	3	Architecture	3 <sup>rd</sup>
100	Urban and Community Design	3		3 <sup>rd</sup>