



MODEL ENGINEERING COLLEGE, THRIKKAKKARA, COCHIN
 Scheme of M.Tech (Full Time) Degree Course in
MECHANICAL ENGINEERING
 With Specialization in
Energy Management.
 (CUSAT)

SEMESTER I

<i>Course Code</i>	<i>Subject</i>	<i>No. of Credits</i>
EM 101	Numerical Methods in Heat Transfer	3
EM 102	Energy Conversion Systems	3
EM 103	Solar Energy Engineering	3
EM 104	Electrical Energy Systems and Management	3
EM 105	Elective I	3
EM 106	Elective II	3
EM 107	Seminar I	1
EM 108	Computational Laboratory	1
Total		20

Elective I

EM 105 (A)	Economics of Energy Engineering
EM 105 (B)	Process Reliability Engineering
EM 105 (C)	Energy Policies For Sustainable Development

Elective II

EM 106 (A)	Energy Systems Modeling and Analysis
EM 106 (B)	Management tools in Engineering Design
EM 106 (C)	Vehicle Power Management

SEMESTER II

<i>Course Code</i>	<i>Subject</i>	<i>No. of Credits</i>
EM 201	Energy Conservation in Thermal and Electrical Systems	3
EM 202	Energy Audit and Management	3
EM 203	Renewable Energy Technology	3
EM 204	Energy and Environment	3
EM 205	Elective III	3
EM 206	Elective IV	3
EM 207	Seminar II	1
EM 208	Solar Energy Engineering Laboratory	1
Total		20

Elective III

EM 205 (A)	Heat Transfer in Energy Systems
EM 205 (B)	Emerging Refrigeration Technologies
EM 205 (C)	Thermal Energy Storage Systems

Elective IV

EM 206 (A)	Optimum Utilization of Heat and Power
EM 206 (B)	Safety Technology and Management
EM 206 (C)	Research Methodology

SEMESTER III

<i>Course Code</i>	<i>Subject</i>	<i>No. of Credits</i>
EM 301	Project - Progress Evaluation	15
Total		15

SEMESTER IV

<i>Course Code</i>	<i>Subject</i>	<i>No. of Credits</i>
EM 401	Project - Progress Evaluation	17
Total		17