



APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

Curriculum

for

B.Tech(Evening) Degree

Semesters I to VIII

2016

Mechanical Engineering

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

CET CAMPUS, THIRUVANANTHAPURAM – 695016

KERALA, INDIA

Phone +91 471 2598122, 2598422

Fax +91 471 2598522 Web: ktu.edu.in

Email: university@ktu.edu.in

BRANCH: *Mechanical Engineering*

SEMESTER - 1

Course Code	Course Name	L-T-P	Credits	Exam Slot
MA201	Linear Algebra & Complex Analysis	3-1-0	4	A
ME201	Mechanics of Solids	3-1-0	4	B
ME203	Mechanics of Fluids	3-1-0	4	C
ME205	Thermodynamics	3-1-0	4	D
ME231	Computer Aided Machine Drawing Lab	0-0-3	1	S
CE230	Material Testing Lab	0-0-3	1	T

Total Credits = 18

Hours: 22

Cumulative Credits= 18

SEMESTER - 2

Course Code	Course Name	L-T-P	Credits	Exam Slot
MA202	Probability Distributions, Transforms and Numerical Methods	3-1-0	4	A
ME202	Advanced Mechanics of Solids	3-1-0	4	B
ME204	Thermal Engineering	3-1-0	4	C
ME206	Fluid Machinery	2-1-0	3	D
ME220	Manufacturing Technology	3-0-0	3	E
ME230	Fluid Mechanics & Machines Lab	0-0-3	1	T

Total Credits = 19

Hours :21

Cumulative Credits= 37

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SEMESTER - 3

Course Code	Course Name	L-T-P	Credits	Exam Slot
ME301	Mechanics of Machinery	3-1-0	4	A
ME303	Machine Tools and Digital Manufacturing	3-0-0	3	B
ME305	Computer Programming & Numerical Methods	2-0-1	3	C
ME210	Metallurgy and Materials Engineering	3-0-0	3	E
HS210	Life Skills	2-0-2	3	F
ME331	Manufacturing Technology Lab I	0-0-3	1	U

Total Credits = 17

Hours: 20

Cumulative Credits= 54

SEMESTER - 4

Course Code	Course Name	L-T-P	Credits	Exam Slot
ME302	Heat and Mass Transfer	3-1-0	4	A
ME304	Dynamics of Machinery	2-1-0	3	B
ME312	Metrology and Instrumentation	3-0-0	3	E
HS200	Business Economics	3-0-0	3	F
ME232	Thermal Engineering Lab	0-0-3	1	S
ME334	Manufacturing Technology Lab II	0-0-3	1	T

Total Credits = 15

Hours: 19

Cumulative Credits= 69

BRANCH: *Mechanical Engineering*

SEMESTER - 5

Course Code	Course Name	L-T-P	Credits	Exam Slot
ME401	Design of Machine Elements I	3-1-0	4	A
ME403	Advanced Energy Engineering	3-0-0	3	B
EE311	Electrical Drives and Control for Automation	3-0-0	3	D
HS300	Principles of Management	3-0-0	3	E
	Elective 1	3-0-0	3	F
ME341	Design Project	0-1-2	2	S
EE335	Electrical and Electronics Lab	0-0-3	1	T

Total Credits = 19

Hours: 22

Cumulative Credits= 88

- Elective 1:-
1. ME361 Advanced Fluid Mechanics
 2. ME363 Composite Materials & Mechanics
 3. ME365 Advanced Metal Casting
 4. ME367 Non-Destructive Testing
 5. ME369 Tribology
 6. ME371 Nuclear Engineering
 7. ME373 Human Relations Management

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SEMESTER - 6

Course Code	Course Name	L-T-P	Credits	Exam Slot
ME402	Design of Machine Elements II	3-0-0	3	A
ME404	Industrial Engineering	3-0-0	3	B
ME306	Advanced Manufacturing Technology	3-0-0	3	C
ME308	Computer Aided Design and Analysis	3-0-0	3	D
	Elective 2	3-0-0	3	F
ME332	Computer Aided Design and Analysis Lab	0-0-3	1	S
ME352	Comprehensive Exam	0-1-1	2	U

Total Credits = 18

Hours: 20

Cumulative Credits= 106

Elective 2:-

1. ME362 Control System Engineering
2. ME364 Turbo Machinery
3. ME366 Advanced Metal Joining Technology
4. ME368 Marketing Management
5. ME372 Operations Research
6. ME374 Theory of Vibration
7. ME376 Maintenance Engineering

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SEMESTER - 7

Course Code	Course Name	L-T-P	Credits	Exam Slot
ME405	Refrigeration and Air Conditioning	2-1-0	3	C
ME407	Mechatronics	3-0-0	3	D
ME409	Compressible Fluid Flow	2-1-0	3	E
	Elective 3	3-0-0	3	F
ME451	Seminar & Project Preliminary	0-1-4	2	S
ME431	Mechanical Engineering Lab	0-0-3	1	T

Total Credits = 15

Hours: 20

Cumulative Credits= 121

Elective 3:-

1. ME461 Aerospace Engineering
2. ME463 Automobile Engineering
3. ME465 Industrial Hydraulics
4. IE306 Supply Chain and Logistics Management
5. ME467 Cryogenic Engineering
6. ME469 Finite Element Analysis
7. ME471 Optimization Techniques

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SEMESTER - 8

Course Code	Course Name	L-T-P	Credits	Exam Slot
	Elective 4	3-0-0	3	C
	Elective 5 (Non Departmental)	3-0-0	3	D
ME492	Project	0-0-12	6	S

Total Credits = 12

Hours: 18

Cumulative Credits= 133

Elective 4:-

1. ME462 Propulsion Engineering
2. ME464 Robotics and Automation
3. ME466 Computational Fluid Dynamics
4. ME468 Nanotechnology
5. ME472 Failure Analysis and Design
6. ME474 Micro and Nano Manufacturing
7. ME476 Material Handling & Facilities Planning

ELECTIVE 5 (NON DEPARTMENTAL ELECTIVE COURSES)

(Note:- If a student has studied or chosen the elective course given within the brackets then the corresponding ND elective cannot be chosen)

1. CE482 ENVIRONMENTAL IMPACT ASSESSMENT
2. CE484 APPLIED EARTH SYSTEMS
3. CE486 GEO INFORMATICS FOR INFRASTRUCTURE MANAGEMENT
4. CE488 DISASTER MANAGEMENT
5. CE494 ENVIRONMENT HEALTH AND SAFETY
6. CS482 DATA STRUCTURES
7. CS484 COMPUTER GRAPHICS
8. CS486 OBJECT ORIENTED PROGRAMMING
9. CS488 C # AND .NET PROGRAMMING
10. EE484 CONTROL SYSTEMS (ME362 Control System Engineering)
11. EE486 SOFT COMPUTING
12. EE488 INDUSTRIAL AUTOMATION (. ME464 Robotics and Automation)
13. EE494 INSTRUMENTATION SYSTEMS
14. EC482 BIOMEDICAL ENGINEERING
15. MA482 APPLIED LINEAR ALGEBRA
16. MA484 OPERATIONS RESEARCH (ME372 Operations Research)
17. MA486 ADVANCED NUMERICAL COMPUTATIONS
18. MA488 CRYPTOGRAPHY
19. HS482 PROFESSIONAL ETHICS