DEPARMENT OF MECHANICAL ENGINEERING

Curriculum for the five year Dual Degree program (TFE)											
Semester I						**Semester – II**					
Course code	**Course Name**	**Credit Structure**				**Course Code**	**Course Name**	**Credit Structure**			
		L	**T**	**P**	**C**			**L**	**T**	**P**	**C**
MA 105	Calculus	**3**	**1**	**0**	**8**	MA 106	Linear Algebra	**2**	**0**	**0**	**4**
PH 107	Quantum Physics	**2**	**1**	**0**	**6**	MA 108	Ordinary Differential Equations	**2**	**0**	**0**	**4**
CH 105	Organic Chemistry & Inorganic Chemistry	**2**	**0**	**0**	**4**	PH 108	Electricity and Magnetism	**2**	**1**	**0**	**6**
CH 107	Physical Chemistry	**2**	**0**	**0**	**4**	ME 119	Engineering Graphics & Drawing	**0**	**1**	**3**	**5**
CS 101/ BB 101	Computer Programming/ Biology	**2**	**1**	**0**	**6**	CS 101/ BB 101	Computer Programming/ Biology	**2**	**1**	**0**	**6**
ME 113	Workshop Practice	**1**	**0**	**3**	**4**	CE 102	Engineering Mechanics	**2**	**1**	**0**	**6**
PH 117/ CH 117	Physics Lab Chemistry Lab	**0**	**0**	**3**	**3**	PH 117/ CH 117	Physics Lab Chemistry Lab	**0**	**0**	**3**	**3**
NC 101	National Cadet Corps (NCC)	**0**	**0**	**0**	**P/NP**	NC 102	National Cadet Corps (NCC)	**0**	**0**	**0**	**P/NP**
NO 101	National Sports Organization (NSS)	**0**	**0**	**0**	**P/NP**	NO 102	National Sports Organization (NSS)	**0**	**0**	**0**	**P/NP**
NS 101	National Service Scheme (NSS)	**0**	**0**	**0**	**P/NP**	NS 102	National Service Scheme (NSS)	**0**	**0**	**0**	**P/NP**
	Total Credits				**35**		Total Credits				**34**

Curriculum for the five year Dual Degree program (TFE)											
Semester III						**Semester – IV**					
Course code	**Course Name**	**Credit Structure**				**Course Code**	**Course Name**	**Credit Structure**			
		L	**T**	**P**	**C**			**L**	**T**	**P**	**C**
ME 201	Solid Mechanics	**2**	**1**	**0**	**6**	ME 202	Strength of Materials	**2**	**1**	**0**	**6**
ME 209	Thermodynamics	**2**	**1**	**0**	**6**	ME 226	Mechanical Measurement	**2**	**1**	**0**	**6**
EE 101	Introduction to Electrical and Electronics Circuits	**3**	**1**	**0**	**8**	ME 206	Manufacturing Processes I	**2**	**1**	**0**	**6**
MM 207	Engineering Metallurgy	**2**	**1**	**0**	**6**	MA 214	Numerical Analysis	**3**	**1**	**0**	**8**
ME 219	Fluid Mechanics	**3**	**1**	**0**	**8**	ME 224	Fluid Mechanics Lab.	**0**	**0**	**3**	**3**
HS 101	Economics	**2**	**1**	**0**	**6**	ME 218	Solid Mechanics Lab	**0**	**0**	**3**	**3**
						ME 213	Manufacturing Practice Lab				**5**
Total					**40**	**Total**					**37**

Curriculum for the five year Dual Degree program (TFE)											
Semester V						**Semester – VI**					
Course code	**Course Name**	**Credit Structure**				**Course Code**	**Course Name**	**Credit Structure**			
		L	**T**	**P**	**C**			**L**	**T**	**P**	**C**
ME 346	Heat Transfer	**2**	**1**	**0**	**6**	ME 306	Applied Thermodynamics	**2**	**1**	**0**	**6**
ME311	Microprocessor and Automatic Controls	**2**	**1**	**0**	**6**	ME 316	Kinematics and Dynamics of Machines	**2**	**1**	**0**	**6**
ME 338	Manufacturing Processes II	**2**	**1**	**0**	**6**						
HS 303	Psychology or Sociology	**3**	**0**	**0**	**6**	ES 200	Environmental studies, Science & Engineering	**3**	**0**	**0**	**3**
						HS 200	Environmental Studies	**3**	**0**	**0**	**3**
ME 374	Manufacturing Processes Lab	**0**	**0**	**3**	**3**	ME 370	Kinematics and Dynamics of Machines Lab	**0**	**0**	**3**	**3**
ME 307	Mechanical Measurements Lab	**0**	**0**	**3**	**3**	ME 372	Heat Transfer and Metrology Lab	**0**	**0**	**3**	**3**
ME 661	Advanced Thermodynamics	**3**	**0**	**0**	**6**	ME 308	Industrial Engg. and Operations Research	**2**	**1**	**0**	**6**
ME 651	Fluid Dynamics	**2**	**1**	**0**	**6**	ME 310	Microprocessor and Automatic Controls Lab.	**0**	**0**	**3**	**3**
							Department Elective I	**3**	**0**	**0**	**6**
Total					**42**	**Total**					**39**

Curriculum for the five year Dual Degree program (TFE)											
Semester VII						**Semester – VIII**					
Course code	**Course Name**	**Credit Structure**				**Course Code**	**Course Name**	**Credit Structure**			
		L	**T**	**P**	**C**			**L**	**T**	**P**	**C**
ME 423	Machine Design	**2**	**1**	**2**	**8**						
							Department Elective IV	**3**	**0**	**0**	**6**
	Department Elective II	**3**	**0**	**0**	**6**		Department Elective V	**3**	**0**	**0**	**6**
	Department Elective III	**3**	**0**	**0**	**6**		Department Elective VI	**3**	**0**	**0**	**6**
	Institute Elective I	**3**	**0**	**0**	**6**						
							Department Elective VII	**3**	**0**	**0**	**6**
							Institute Elective II	**3**	**0**	**0**	**6**
ME 441	Applied Thermodynamics Lab	**0**	**0**	**3**	**3**	ME 657	TFE Lab.	**3**	**0**	**0**	**6**
ME 663	Advanced Heat Transfer	**3**	**0**	**0**	**6**						
ME 704	Computational methods in thermal and fluid engineering	**1**	**0**	**4**	**6**						
Total					**41**	**Total**					**36**

Curriculum for the five year Dual Degree program (TFE)											
Semester IX						**Semester X**					
Course code	**Course Name**	**Credit Structure**				**Course Code**	**Course Name**	**Credit Structure**			
		L	**T**	**P**	**C**			**L**	**T**	**P**	**C**
	Department ElectiveVIII	3	0	0	6	ME	Dual Degree Project (Stage II)	0	0	0	42
	Department ElectiveIX	3	0	0	6						
ME	Dual Degree Project (Stage I)	0	0	0	30*						
Total					**42**	**Total**					**42**