

Table of Curriculum (Undergraduate Program)

Classification	Course No.	Computer Code	Course Name	Lecture: Lab: Credit (Assignment)	Semster	Note	
Elective Basic	ME106	B7.106	Human and Machine	3:0:3(3)	Fall		
Mandatory Major Courses	ME200	B7.200	Basic Mechanical Practice	2:3:3(3)	Spring		
	ME303	B7.303	Mechanical Engineering Laboratory	2:3:3(6)	Spring, Fall		
	ME340	B7.340	Engineering Design	2:3:3(6)	Fall		
	ME400	B7.400	Capstone Design I	1:6:3(6)	Spring	⊙	
Elective Major Courses	Basic	ME207	B7.207	Applied Electronics	2:3:3(6)	Spring	
		ME211	B7.211	Thermodynamics	3:0:3(6)	Spring	
		ME221	B7.221	Fluid Mechanics	3:0:3(6)	Fall	
		ME231	B7.231	Solid Mechanics	3:1:3(6)	Spring	
		ME251	B7.251	Dynamics	3:0:3(6)	Fall	
		ME311	B7.311	Heat Transfer	3:0:3(6)	Spring	
		ME351	B7.351	Mechanical Vibrations	3:0:3(6)	Spring	
		ME361	B7.361	Modeling and Control of Engineering Systems	3:0:3	Spring or Fall	
	ME370	B7.370	Understanding of Materials and Processing	3:0:3(6)	Spring		
	Advanced	ME203	B7.203	Mechatronics System Design	2:3:3(6)	Fall	
		ME301	B7.301	Numerical Analysis	3:0:3(6)	Spring	
		ME302	B7.302	Creative Problem Solving	2:3:3(6)	Spring	
		ME305	B7.305	Electronics Laboratory for Mechanical Engineers	2:3:3(6)	Spring, Fall	
		ME312	B7.312	Energy and Environment	3:0:3(6)	Fall	
		ME320	B7.320	Applied Fluid Mechanics	3:0:3(6)	Spring	
		ME330	B7.330	Foundation of Stress Analysis	3:0:3(6)	Spring	
ME341		B7.341	Mechanical Component Design	3:0:3(6)	Fall		
ME342		B7.342	Mechanism Design	3:0:3(6)	Fall		
ME371		B7.371	Advanced Materials Engineering and its Application	3:0:3(6)	Fall		
ME401		B7.401	Capstone Design II	1:6:3(6)	Fall	⊙	
ME403		B7.403	Introduction to Naval Architecture and Ocean Engineering	3:0:3(6)	Spring, Summer, Fall, Winter	⊙	
ME404		B7.404	Introduction to Simulation of Medical Procedures	3:1:3(6)	Spring	⊙	
ME405		B7.405	Design Thinking and Entrepreneurship	2:3:3(6)	Spring, Fall	⊙	
ME411	B7.411	Energy System Design and Optimization	3:0:3(3)	Fall	⊙		
ME413	B7.413	Engine Technology	3:0:3(6)	Spring	⊙		
ME414	B7.414	Applied superconductivity and Thermal Engineering	3:0:3(6)	Fall	⊙		
ME416	B7.416	Vehicle Dynamics	3:0:3(6)	Spring	⊙		

Classification	Course No.	Computer Code	Course Name	Lecture: Lab: Credit (Assignment)	Semster	Note
	ME421	B7.421	Microfluidics	3:0:3(6)	Fall	⊙
	ME422	B7.422	Fluids and Environment	3:0:3	Spring	⊙
	ME430	B7.430	Introduction to Reliability in Mechanical Engineering Design	3:0:3(6)	Fall	⊙
	ME431	B7.431	Introduction to Continuum Mechanics	3:0:3(6)	Fall	⊙
	ME432	B7.432	Deformation, Fracture and Strength of Materials	3:0:3(6)	Spring	⊙
	ME440	B7.440	Engineering Design via FEM	3:1:3(6)	Spring	⊙
	ME452	B7.452	Noise Control Engineering	3:0:3(6)	Fall	⊙
	ME453	B7.453	Introduction to Robotics Engineering	3:0:3(6)	Fall	⊙
	ME459	B7.459	Introduction to Visual Intelligence	3:0:3	Spring	⊙
	ME460	B7.460	Automatic Control	2:3:3	Spring or Fall	⊙
	ME461	B7.461	Introduction to Fuel Cell Systems	3:0:3(6)	Spring	⊙
	ME475	B7.475	Mechanical Engineering and Applied Mathematics	3:0:3(6)	Fall	⊙
	ME480	B7.480	Introduction to Biomedical Optics	3:0:3(6)	Fall	⊙
	ME481	B7.481	Introduction to Electromagnetism & Optics	3:1:3(6)	Spring	⊙
	ME484	B7.484	Structure & Function of Human Body	3:0:3(6)	Fall	⊙
	ME487	B7.487	Introduction to Cell Mechanics	3:0:3(6)	Spring	⊙
	ME488	B7.488	Introduction to biomedical machine technology	3:0:3(6)	Fall	⊙
	ME489	B7.489	Special Topics in Mechanical Engineering Practice I	2:3:3	Spring or Fall	⊙
	ME491	B7.491	Special Topics in Mechanical Engineering	3:0:3(6)	Spring, Fall	⊙
	ME492	B7.492	Special Topics in Mechanical Engineering Practice	1:6:3	Spring, Fall	⊙
	ME493	B7.493	Special Topics in Mechanical Engineering I	1:0:1	Summer, Winter	⊙
	ME494	B7.494	Special Topics in Mechanical Engineering II	2:0:2	Summer, Winter	⊙
Research	ME490	B7.490	Thesis Study	0:6:3	Spring, Fall	
	ME495	B7.495	Individual Study	0:6:1	Spring, Fall	
	ME496	B7.496	Seminar	1:0:1	Spring, Fall	

⊙ A course mutually recognized by undergraduate and graduate programs.

Table of Curriculum(Graduate Program)

Classification	Course No.	Computer Code	Course Name	Lecture: Lab: Credit (Assignment)	Semster	Note
Elective Major Courses	ME500	B7.500	Mathematical Methods in Mechanical Engineering	3:0:3(6)	Spring	⊙
	ME502	B7.502	Introduction to Finite Element Method	3:0:3(6)	Spring	⊙
	ME505	B7.505	Measurement Instrumentation	3:0:3(6)	Fall	⊙
	ME510	B7.510	Advanced Fluid Mechanics	3:0:3(6)	Spring	⊙
	ME511	B7.511	Advanced Thermodynamics	3:0:3(6)	Spring	⊙
	ME512	B7.512	Advanced Heat Transfer	3:0:3(6)	Fall	⊙
	ME513	B7.513	Advanced Combustion	3:0:3(6)	Fall	⊙
	ME514	B7.514	Multiphase Flow I	3:0:3(6)	Fall	⊙
	ME515	B7.515	Cryogenic Engineering	3:0:3(6)	Spring	⊙
	ME516	B7.516	Experimental Thermo-Fluid Engineering	2:3:3	Fall	⊙
	ME517	B7.517	Interfacial flow	3:0:3	Spring	⊙
	ME521	B7.521	Viscous Fluid Flow	3:0:3(6)	Fall	⊙
	ME526	B7.526	Introduction to Nanotech Processing	3:0:3(6)	Fall	⊙
	ME530	B7.530	Advanced Mechanics of Solids	3:0:3(6)	Spring	⊙
	ME533	B7.533	Fracture Mechanics	3:0:3(6)	Fall	⊙
	ME534	B7.534	Fatigue Fracture and Strength	3:0:3(6)	Spring	⊙
	ME536	B7.536	Mechanics of Plastic Deformation	3:0:3(6)	Fall	⊙
	ME537	B7.537	Optimal Design of Composite Structures	3:0:3(6)	Spring	⊙
	ME543	B7.543	Optimal Design	3:1:3(6)	Fall	⊙
	ME545	B7.545	Theory of Hydrodynamics Lubrication	3:0:3(6)	Spring	⊙
	ME547	B7.547	Knowledge - Based Design System	3:1:3(6)	Fall	⊙
	ME549	B7.549	Reliability in Microsystems Packaging	3:1:3(6)	Fall	⊙
	ME550	B7.550	Advanced Dynamics	3:0:3(6)	Fall	⊙
	ME551	B7.551	Linear Vibration	3:0:3(6)	Spring	⊙
	ME552	B7.552	Introduction to Acoustics	3:0:3(6)	Spring	⊙
	ME553	B7.553	Robot Dynamics	3:0:3(6)	Spring, Fall	⊙
	ME554	B7.554	Future Energy-utilization Engineering	3:0:3(6)	Spring, Fall	⊙
	ME561	B7.561	Linear System Control	3:0:3(6)	Spring	⊙
	ME562	B7.562	Digital System Control	3:0:3(6)	Fall	⊙
	ME564	B7.564	Artificial Neural Network: Theory and Applications	3:0:3(6)	Spring	⊙
	ME567	B7.567	Introduction to Statistical Thermodynamics	3:0:3(6)	Fall	⊙
	ME570	B7.570	Advanced Manufacturing Systems	3:0:3(6)	Spring	⊙
	ME572	B7.572	Design and Implementation of Nano Actuation System	2:3:3(6)	Spring	⊙
	ME574	B7.574	Joining Engineering	3:1:3(6)	Fall	⊙
	ME576	B7.576	Vehicle Dynamics and Control	3:1:3(6)	Spring	⊙
ME582	B7.582	Introduction to Microfabrication Technology	3:0:3(6)	Spring	⊙	
ME583	B7.583	MEMS Design and Experimental Microfabrication	2:3:3(6)	Fall	⊙	
ME585	B7.585	Mechanics and Control of Human	3:0:3(6)	Spring	⊙	

Classification	Course No.	Computer Code	Course Name	Lecture: Lab: Credit (Assignment)	Semster	Note
			Movement			
	ME587	B7.587	Optomechatronics	3:0:3(6)	Fall	⊙
	ME589	B7.589	Applied Optics	3:1:3(6)	Spring	⊙
	ME591	B7.591	Random Data: Analysis and Processing	3:1:3(6)	Fall	⊙
	ME592	B7.592	Laser: Principles and Applications	3:0:3(6)	Fall	⊙
	ME600	B7.600	Mechanical System Design Project 1	0:9:3(6)	Spring	
	ME601	B7.601	Mechanical System Design Project 2	0:9:3(6)	Fall	
	ME604	B7.604	Metrology	2:3:3(6)	Spring	
	ME606	B7.606	Creative Knowledge Creation Process and Application	3:0:3(6)	Fall	
	ME607	B7.607	Computational Linear Algebra	3:1:3(6)	Spring	
	ME611	B7.611	Convective Heat Transfer	3:0:3(6)	Spring	
	ME612	B7.612	Transport Phenomena	3:0:3(6)	Spring	
	ME613	B7.613	Computational Fluid Mechanics and Heat Transfer	3:0:3(6)	Fall	
	ME615	B7.615	Nanoscale Heat Transfer	3:0:3(6)	Spring	
	ME616	B7.616	Automobile Technology and Environment	3:0:3(6)	Fall	
	ME617	B7.617	Advanced Vehicle Control Design	3:0:3(6)	Fall	
	ME621	B7.621	Turbulence	3:0:3(6)	Spring	
	ME623	B7.623	Rotating Flow	3:0:3(6)	Fall	
	ME632	B7.632	Theory of Viscoelasticity	3:0:3(6)	Fall	
	ME633	B7.633	Mechanical Behavior of Polymeric and Composite Materials	3:0:3(6)	Fall	
	ME635	B7.635	Plastic Analysis and Design of Structures	3:0:3(6)	Fall	
	ME638	B7.638	Axiomatic Design of Composite Structure	3:0:3(6)	Spring	
	ME639	B7.639	Introduction to Elasticity and Micromechanics	3:0:3(6)	Fall	
	ME642	B7.642	Medical Biomechanics	3:0:3(6)	Fall	
	ME644	B7.644	Tribology	3:0:3(6)	Spring	
	ME647	B7.647	STEP for Electronic Commerce	3:1:3(6)	Spring	
	ME653	B7.653	Mechanical Signature and System Analysis	3:1:3(6)	Fall	
	ME654	B7.654	Noise Control	3:0:3(6)	Fall	
	ME655	B7.655	Robotics Engineering	3:1:3(6)	Fall	
	ME656	B7.656	Vehicle NVH	3:1:3(6)	Fall	
	ME662	B7.662	Design of Precision Actuation System	3:0:3(6)	Spring	
	ME674	B7.674	Optical Imaging System Design	3:0:3(6)	Fall	
	ME675	B7.675	Ultrafast Optic Technology	3:0:3	Fall	
	ME683	B7.683	Human Robot Interaction: Haptics	3:0:3(6)	Fall	
	ME692	B7.692	Wave Propagation	3:0:3(6)	Spring	
	ME711	B7.711	Radiation Heat Transfer	3:0:3(6)	Spring	
	ME722	B7.722	Computational Turbulence Modeling	3:0:3(6)	Spring	
	ME731	B7.731	Nonlinear Computational Mechanics of Solid	3:0:3(6)	Spring	
	ME732	B7.732	Reliability in Strength Design	3:0:3(6)	Fall	
	ME752	B7.752	Structure-borne Sound	3:0:3(6)	Fall	

Classification	Course No.	Computer Code	Course Name	Lecture: Lab: Credit (Assignment)	Semster	Note
	ME761	B7.761	Nonlinear System Control	3:0:3(6)	Spring	
	ME771	B7.771	Analysis and Design of Metal Forming Processes	3:1:3(6)	Fall	
	ME781	B7.781	Molecular Dynamics and Nanomechanics	3:0:3(6)	Spring	
	ME800	B7.800	Special Topics in Mechanical Engineering	3:0:3(6)	Spring, Fall	
	ME801	B7.801	Special topics in Mechanical Engineering I	1:0:1	Summer, Winter	
	ME802	B7.802	Special topics in Mechanical Engineering II	2:0:2	Summer, Winter	
	ME810	B7.810	Special Topics in Thermal & Fluid Engineering	3:0:3(6)	Fall	
	ME830	B7.830	Special Topics in Design Engineering	3:0:3(6)	Fall	
	ME850	B7.850	Special Topics in Dynamics and Control	3:0:3(6)	Spring, Fall	
	ME870	B7.870	Special Topics in Production Engineering	3:0:3(6)	Spring, Fall	
Research	ME960	B7.960	M.S. Thesis		Spring, Fall	
	ME964	B7.964	Individual Research M.S.	0:3:1	Spring, Summer, Fall, Winter	
	ME966	B7.966	Seminar (M.S. Program)	1:0:1	Spring, Fall	
	ME967	B7.967	Individual Research M.S.	0:6:2	Spring, Fall	
	ME980	B7.980	Ph.D. Thesis		Spring, Fall	
	ME985	B7.985	Individual Research Ph.D.	0:3:1	Spring, Summer, Fall, Winter	
	ME986	B7.986	Seminar (Ph.D.)	1:0:1	Spring, Fall	

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Substitute Course List

Substitute courses in the department					
Category	Courses currently offered		Courses not currently offered		
	Course no.	Course title	Course no.	Course title	Remark
Under-graduate	ME106	Human and Machine	MAE106	Human and Machine	Change in Course Code
Under-graduate	ME200	Basic Mechanical Practice	MAE200	Basic Mechanical Practice	Change in Course Code
Under-graduate	ME203	Mechatronics System Design	MAE203	Mechatronics System Design	Change in Course Code
Under-graduate	ME207	Applied Electronics	ME307	Applied Electronics	Change in Course Code
Under-graduate	ME211	Thermodynamics	MAE211	Thermodynamics	Change in Course Code
Under-graduate	ME221	Fluid Mechanics	MAE221	Fluid Mechanics	Change in Course Code
Under-graduate	ME231	Solid Mechanics	MAE231	Solid Mechanics	Change in Course Code
Under-graduate	ME251	Dynamics	MAE251	Dynamics	Change in Course Code
Under-graduate	ME301	Numerical Analysis	MAE301	Numerical Analysis	Change in Course Code
Under-graduate	ME302	Creative Problem Solving	MAE302	Creative Problem Solving	Change in Course Code
Under-graduate	ME303	Mechanical Engineering Laboratory	ME205	Mechanical Engineering Laboratory	Change in Course Code
Under-graduate	ME305	Electronics Laboratory for Mechanical Engineers	MAE305	Electronics Laboratory for Mechanical Engineers	Change in Course Code
Under-graduate	ME311	Heat Transfer	MAE311	Heat Transfer	Change in Course Code
Under-graduate	ME312	Energy and Environment	MAE312	Energy and Environment	Change in Course Code
Under-graduate	ME320	Applied Fluid Mechanics	ME420	Applied Fluid Mechanics	Change in Course Code
Under-graduate	ME330	Foundation of Stress Analysis	MAE330	Foundation of Stress Analysis	Change in Course Code
Under-graduate	ME340	Engineering Design	MAE340	Engineering Design	Change in Course Code
Under-graduate	ME341	Mechanical Component Design	MAE341	Mechanical Component Design	Change in Course Code
Under-graduate	ME342	Mechanism Design	MAE342	Mechanism Design	Change in Course Code
Under-graduate	ME351	Mechanical Vibrations	MAE351	Mechanical Vibrations	Change in Course Code
Under-graduate	ME360	Modeling and Control of Engineering Systems	MAE360	Modeling and Control of Engineering Systems	Change in Course Code
Under-graduate	ME370	Understanding of Materials and Processing	MAE370	Understanding of Materials and Processing	Change in Course Code
Under-	ME371	Advanced Materials	MAE371	Advanced Materials	Change in

Substitute courses in the department					
Category	Courses currently offered		Courses not currently offered		
	Course no.	Course title	Course no.	Course title	Remark
graduate		Engineering and its Application		Engineering and its Application	Course Code
Under-graduate	ME400	Capstone Design I	MAE400	Capstone Design I	Change in Course Code
Under-graduate	ME401	Capstone DesignII	MAE401	Capstone DesignII	Change in Course Code
Under-graduate	ME403	Introduction to Naval Architecture and Ocean Engineering	OSE503	Introduction to Naval Architecture and Ocean Engineering	Change in Course Code
Under-graduate	ME404	Introduction to Simulation of Medical Procedures	MAE404	Introduction to Simulation of Medical Procedures	Change in Course Code
Under-graduate	ME411	Energy System Design and Optimization	MAE411	Optimum Design of Energy Plant	Change in Course Code
Under-graduate	ME413	Energy System Design and Optimization	MAE413	Energy System Design and Optimization	Change in Course Code
Under-graduate	ME414	Engine Technology	MAE414	Engine Technology	Change in Course Code
Under-graduate	ME416	Applied superconductivity and Thermal Engineering	MAE416	Applied superconductivity and Thermal Engineering	Change in Course Code
Under-graduate	ME430	Vehicle Dynamics	MAE430	Vehicle Dynamics	Change in Course Code
Under-graduate	ME431	Introduction to Continuum Mechanics	MAE431	Introduction to Continuum Mechanics	Change in Course Code
Under-graduate	ME432	Deformation, Fracture and Strength of Materials	MAE432	Deformation, Fracture and Strength of Materials	Change in Course Code
Under-graduate	ME440	Engineering Design via FEM	MAE440	Engineering Design via FEM	Change in Course Code
Under-graduate	ME452	Noise Control Engineering	MAE452	Noise Control Engineering	Change in Course Code
Under-graduate	ME453	Introduction to Robotics Engineering	MAE453	Introduction to Robotics Engineering	Change in Course Code
Under-graduate	ME460	Automatic Control	MAE460	Automatic Control	Change in Course Code
Under-graduate	ME461	Introduction to Fuel Cell Systems	MAE461	Introduction to Fuel Cell Systems	Change in Course Code
Under-graduate	ME475	Mechanical Engineering and Applied Mathematics	MAE475	Mechanical Engineering and Applied Mathematics	Change in Course Code
Under-graduate	ME480	Introduction to Biomedical Optics	MAE480	Introduction to Biomedical Optics	Change in Course Code
Under-graduate	ME481	Introduction to Electromagnetism & Optics	MAE481	Introduction to Electromagnetism & Optics	Change in Course Code
Under-graduate	ME484	Structure & Function of Human Body	MAE484	Structure & Function of Human Body	Change in Course Code
Under-graduate	ME487	Introduction to Cell Mechanics	MAE487	Introduction to Cell Mechanics	Change in Course Code
Under-graduate	ME488	Introduction to biomedical machine technology	MAE488	Introduction to biomedical machine technology	Change in Course Code
Under-graduate	ME490	Thesis Study	MAE490	Thesis Study	Change in Course Code

Substitute courses in the department

Category	Courses currently offered		Courses not currently offered		
	Course no.	Course title	Course no.	Course title	Remark
Under-graduate	ME491	Special Topics in Mechanical Engineering	MAE491	Special Topics in Mechanical Engineering	Change in Course Code
Under-graduate	ME493	Special Topics in Mechanical Engineering I	MAE493	Special Topics in Mechanical Engineering I	Change in Course Code
Under-graduate	ME494	Special Topics in Mechanical EngineeringII	MAE494	Special Topics in Mechanical EngineeringII	Change in Course Code
Under-graduate	ME495	Individual Study	MAE495	Individual Study	Change in Course Code
Under-graduate	ME496	Seminar	MAE496	Seminar	Change in Course Code
Graduate	ME500	Mathematical Methods in Mechanical Engineering	MAE500	Mathematical Methods in Mechanical Engineering	Change in Course Code
Graduate	ME502	Introduction to Finite Element Method	MAE502	Introduction to Finite Element Method	Change in Course Code
Graduate	ME505	Measurement Instrumentation	MAE505	Measurement Instrumentation	Change in Course Code
Graduate	ME510	Advanced Fluid Mechanics	MAE510	Advanced Fluid Mechanics	Change in Course Code
Graduate	ME511	Advanced Thermodynamics	MAE511	Advanced Thermodynamics	Change in Course Code
Graduate	ME512	Advanced Heat Transfer	MAE512	Advanced Heat Transfer	Change in Course Code
Graduate	ME513	Advanced Combustion	MAE513	Advanced Combustion	Change in Course Code
Graduate	ME514	Multiphase Flow I	MAE514	Multiphase Flow I	Change in Course Code
Graduate	ME515	Cryogenic Engineering	MAE515	Cryogenic Engineering	Change in Course Code
Graduate	ME521	Viscous Fluid Flow	MAE521	Viscous Fluid Flow	Change in Course Code
Graduate	ME526	Introduction to Nanotech Processing	MAE526	Introduction to Nanotech Processing	Change in Course Code
Graduate	ME530	Advanced Mechanics of Solids	MAE530	Advanced Mechanics of Solids	Change in Course Code
Graduate	ME533	Fracture Mechanics	MAE533	Fracture Mechanics	Change in Course Code
Graduate	ME534	Fatigue Fracture and Strength	MAE534	Fatigue Fracture and Strength	Change in Course Code
Graduate	ME536	Mechanics of Plastic Deformation	MAE536	Mechanics of Plastic Deformation	Change in Course Code
Graduate	ME537	Optimal Design of Composite Structures	MAE537	Optimal Design of Composite Structures	Change in Course Code
Graduate	ME543	Optimal Design	MAE543	Optimal Design	Change in Course Code
Graduate	ME545	Theory of Hydrodynamics Lubrication	MAE545	Theory of Hydrodynamics Lubrication	Change in Course Code
Graduate	ME547	Knowledge - Based Design System	MAE547	Knowledge - Based Design System	Change in Course Code
Graduate	ME549	Reliability in Microsystems Packaging	MAE549	Reliability in Microsystems Packaging	Change in Course Code
Graduate	ME550	Advanced Dynamics	MAE550	Advanced Dynamics	Change in Course Code
Graduate	ME551	Linear Vibration	MAE551	Linear Vibration	Change in

Substitute courses in the department

Category	Courses currently offered		Courses not currently offered		
	Course no.	Course title	Course no.	Course title	Remark
					Course Code
Graduate	ME552	Introduction to Acoustics	MAE552	Introduction to Acoustics	Change in Course Code
Graduate	ME553	Robot Dynamics	MAE553	Robot Dynamics	Change in Course Code
Graduate	ME554	Future Energy-utilization Engineering	MAE554	Future Energy-utilization Engineering	Change in Course Code
Graduate	ME561	Linear System Control	MAE561	Linear System Control	Change in Course Code
Graduate	ME562	Digital System Control	MAE562	Digital System Control	Change in Course Code
Graduate	ME564	Artificial Neural Network: Theory and Applications	MAE564	Artificial Neural Network: Theory and Applications	Change in Course Code
Graduate	ME567	Introduction to Statistical Thermodynamics	MAE567	Introduction to Statistical Thermodynamics	Change in Course Code
Graduate	ME570	Advanced Manufacturing Systems	MAE570	Advanced Manufacturing Systems	Change in Course Code
Graduate	ME572	Design and Implementation of Nano Actuation System	MAE572	Design and Implementation of Nano Actuation System	Change in Course Code
Graduate	ME574	Joining Engineering	MAE574	Joining Engineering	Change in Course Code
Graduate	ME576	Vehicle Dynamics and Control	MAE576	Vehicle Dynamics and Control	Change in Course Code
Graduate	ME582	Introduction to Microfabrication Technology	MAE582	Introduction to Microfabrication Technology	Change in Course Code
Graduate	ME583	MEMS Design and Experimental Microfabrication	MAE583	MEMS Design and Experimental Microfabrication	Change in Course Code
Graduate	ME585	Mechanics and Control of Human Movement	MAE585	Mechanics and Control of Human Movement	Change in Course Code
Graduate	ME587	Optomechatronics	MAE587	Optomechatronics	Change in Course Code
Graduate	ME589	Applied Optics	MAE589	Applied Optics	Change in Course Code
Graduate	ME591	Random Data: Analysis and Processing	MAE591	Random Data: Analysis and Processing	Change in Course Code
Graduate	ME592	Laser: Principles and Applications	MAE592	Laser: Principles and Applications	Change in Course Code
Graduate	ME600	Mechanical System Design Project 1	MAE600	Mechanical System Design Project 1	Change in Course Code
Graduate	ME601	Mechanical System Design Project 2	MAE601	Mechanical System Design Project 2	Change in Course Code
Graduate	ME604	Metrology	MAE604	Metrology	Change in Course Code
Graduate	ME606	Creative Knowledge Creation Process and Application	MAE606	Creative Knowledge Creation Process and Application	Change in Course Code
Graduate	ME607	Computational Linear Algebra	MAE607	Computational Linear Algebra	Change in Course Code
Graduate	ME611	Convective Heat Transfer	MAE611	Convective Heat Transfer	Change in Course Code
Graduate	ME612	Transport Phenomena	MAE612	Transport Phenomena	Change in Course Code
Graduate	ME613	Computational Fluid Mechanics and Heat	MAE613	Computational Fluid Mechanics and Heat	Change in Course Code

Substitute courses in the department

Category	Courses currently offered		Courses not currently offered		
	Course no.	Course title	Course no.	Course title	Remark
		Transfer		Transfer	
Graduate	ME616	Automobile Technology and Environment	MAE616	Automobile Technology and Environment	Change in Course Code
Graduate	ME617	Advanced Vehicle Control Design	MAE617	Advanced Vehicle Control Design	Change in Course Code
Graduate	ME621	Turbulence	MAE621	Turbulence	Change in Course Code
Graduate	ME623	Rotating Flow	MAE623	Rotating Flow	Change in Course Code
Graduate	ME632	Theory of Viscoelasticity	MAE632	Theory of Viscoelasticity	Change in Course Code
Graduate	ME633	Mechanical Behavior of Polymeric and Composite Materials	MAE633	Mechanical Behavior of Polymeric and Composite Materials	Change in Course Code
Graduate	ME635	Plastic Analysis and Design of Structures	MAE635	Plastic Analysis and Design of Structures	Change in Course Code
Graduate	ME638	Axiomatic Design of Composite Structure	MAE638	Axiomatic Design of Composite Structure	Change in Course Code
Graduate	ME642	Medical Biomechanics	MAE642	Medical Biomechanics	Change in Course Code
Graduate	ME644	Tribology	MAE644	Tribology	Change in Course Code
Graduate	ME647	STEP for Electronic Commerce	MAE647	STEP for Electronic Commerce	Change in Course Code
Graduate	ME653	Mechanical Signature and System Analysis	MAE653	Mechanical Signature and System Analysis	Change in Course Code
Graduate	ME654	Noise Control	MAE654	Noise Control	Change in Course Code
Graduate	ME655	Robotics Engineering	MAE655	Robotics Engineering	Change in Course Code
Graduate	ME656	Vehicle NVH	MAE656	Vehicle NVH	Change in Course Code
Graduate	ME662	Design of Precision Actuation System	MAE662	Design of Precision Actuation System	Change in Course Code
Graduate	ME674	Optical Imaging System Design	MAE674	Optical Imaging System Design	Change in Course Code
Graduate	ME683	Human Robot Interaction: Haptics	MAE683	Human Robot Interaction: Haptics	Change in Course Code
Graduate	ME692	Wave Propagation	MAE692	Wave Propagation	Change in Course Code
Graduate	ME711	Radiation Heat Transfer	MAE711	Radiation Heat Transfer	Change in Course Code
Graduate	ME722	Computational Turbulence Modeling	MAE722	Computational Turbulence Modeling	Change in Course Code
Graduate	ME731	Nonlinear Computational Mechanics of Solid	MAE731	Nonlinear Computational Mechanics of Solid	Change in Course Code
Graduate	ME732	Reliability in Strength Design	MAE732	Reliability in Strength Design	Change in Course Code
Graduate	ME752	Structure-borne Sound	MAE752	Structure-borne Sound	Change in Course Code
Graduate	ME761	Nonlinear System Control	MAE761	Nonlinear System Control	Change in Course Code
Graduate	ME771	Analysis and Design of Metal Forming Processes	MAE771	Analysis and Design of Metal Forming Processes	Change in Course Code

Substitute courses in the department					
Category	Courses currently offered		Courses not currently offered		
	Course no.	Course title	Course no.	Course title	Remark
Graduate	ME781	Molecular Dynamics and Nanomechanics	MAE781	Molecular Dynamics and Nanomechanics	Change in Course Code
Graduate	ME800	Special Topics in Mechanical Engineering	MAE800	Special Topics in Mechanical Engineering	Change in Course Code
Graduate	ME801	Special topics in Mechanical Engineering I	MAE801	Special topics in Mechanical Engineering I	Change in Course Code
Graduate	ME802	Special topics in Mechanical EngineeringII	MAE802	Special topics in Mechanical EngineeringII	Change in Course Code
Graduate	ME810	Special Topics in Thermal & Fluid Engineering	MAE810	Special Topics in Thermal & Fluid Engineering	Change in Course Code
Graduate	ME830	Special Topics in Design Engineering	MAE830	Special Topics in Design Engineering	Change in Course Code
Graduate	ME850	Special Topics in Dynamics and Control	MAE850	Special Topics in Dynamics and Control	Change in Course Code
Graduate	ME870	Special Topics in Production Engineering	MAE870	Special Topics in Production Engineering	Change in Course Code
Graduate	ME960	M.S. Thesis	MAE960	M.S. Thesis	Change in Course Code
Graduate	ME964	Individual Research M.S.	MAE964	Individual Research M.S.	Change in Course Code
Graduate	ME966	Seminar (M.S. Program)	MAE966	Seminar (M.S. Program)	Change in Course Code
Graduate	ME967	Individual Research M.S.	MAE967	Individual Research M.S.	Change in Course Code
Graduate	ME980	Ph.D. Thesis	MAE980	Ph.D. Thesis	Change in Course Code
Graduate	ME985	Individual Research Ph.D.	MAE985	Individual Research Ph.D.	Change in Course Code
Graduate	ME986	Seminar (Ph.D.)	MAE986	Seminar (Ph.D.)	Change in Course Code

Substitute courses in the department					
Category	Courses currently offered		Courses not currently offered		
	Course no.	Course title	Course no.	Course title	Remark
Under-graduate	ME400	Capstone Design I	CD401	Multidisciplinary Capstone Design I	Unidirectional
Under-graduate	ME401	Capstone DesignII	CD402	Multidisciplinary Capstone Design II	Unidirectional
Under-graduate	ME490	Thesis Study	CD402	Multidisciplinary Capstone Design II	Unidirectional