



Degree and Study Plan

College	Engineering
Department	Mechanical and Industrial Engineering
Cohorts	2023
Degree	Bachelor of Engineering (B. Eng.)
Major	Mechanical Engineering (ME)

Summary of Credits

Credit Category		Courses	Total credits
University Requirements	UR	General Foundation Program	
		Arabic (2 credits)	
		Contemporary Omani State and People (2 credits)	
		Oman and Islamic Civilization or Islamic Culture (2 credits)	
University Electives	UE	See list A	06
College Requirements	CR	See list B	32
College Electives	CE	See list C	03
Department Requirements	DR	See list D	11
Major Requirements	AR	See list E	63
Major Electives	AE	See list F	15
Total Credits			136

For reference contact: Dr. Nasr Al-Hinai

Ext. 1352

HoD:

Date: 17/10/2023

Dean's Office:



Date: 19/10/2023

Admission and Registration:

Date:

Important Information

Student is to follow one of the three schemes of the Degree Plan:

Scheme I is for students who completed the Foundation Program in one regular semester (Fall).

Scheme II is for students who completed the Foundation Program in two regular semesters (Fall and Spring).

Cooperative Training (COOP) Scheme is optional. It is designed for students who are following Scheme I or II and willing to take a one-year COOP program in semesters 9 and 10.

Students are advised to regularly check the most updated degree plan on the Department's webpage. This degree plan is last updated on May 21st, 2023.

Course description can be checked on:

<https://www.squ.edu.om/engineering/Academic/Undergraduate-Programs/Mechanical-Engineering>

Department of Mechanical and Industrial Engineering

Mechanical Engineering Study Plan

Cohort 2023 (Scheme I)

Scheme I FP1 Fall 2023	Course Code	Course Title	Cr.	Pre-req./Co-requisite*	Cat.
		General Foundation Program	0		UR
	Total Credits		0		

Scheme I Semester 1 Spring 2024	Course Code	Course Title	Cr.	Pre-req./Co-requisite*	Cat.
	HIST1010 or ISLM1010	Oman and Islamic Civilization or Islamic Culture	2		UR
	ENGR1501	Introduction to Engineering	1	FPEL (0560 or 0600 or 0601 or 0602 or 0603 or 0604)	CR
	ENGR1600	Workshop I	1	FPEL (0560 or 0600 or 0601 or 0602 or 0603 or 0604)	CR
	CHEM1071	General Chemistry for Engineering	3	FPEL (0560 or 0600 or 0601 or 0602 or 0603 or 0604) and FPMT 0108	CR
	LANC2160	English for Engineering I	3	FPEL (0560 or 0600 or 0601 or 0602 or 0603 or 0604)	CR
	MATH2107	Calculus I	4	FPEL (0560 or 0600 or 0601 or 0602 or 0603 or 0604) and FPMT0108	CR
	Total Credits		14		

Scheme I Semester 2 Fall 2024	Course Code	Course Title	Cr.	Pre-req./Co-requisite*	Cat.
		University Elective	2		UE
	ARAB1060**	Arabic	2		UR
	SOCY1005**	Contemporary Omani State and People	2		UR
	LANC2161	English for Engineering II	3	LANC2160	CR
	MATH2109	Calculus II for Science and Eng.	3	MATH2107	CR
	PHYS2107	Physics for Engineering I	4	MATH2107*, FPEL (0560 or 0600 or 0601 or 0602 or 0603 or 0604) and FPMT0108	CR
	Total Credits		16		

** For non-Arabic speaking or non-Omanis students, please refer to Appendix A.

Scheme I Semester 3 Spring 2025	Course Code	Course Title	Cr.	Pre-req./Co-requisite*	Cat.
		College Elective	3	FPEL (0560 or 0600 or 0601 or 0602 or 0603 or 0604) and FPCS (0101 or 0102)	CE
	MEIE3281	Probability and Statistics for Engineers	3	MATH2107	DR
	PHYS2108	Physics for Engineering II	4	PHYS2107	CR
	MEIE3100	Engineering Mechanics	3	PHYS2107, MATH2107	AR
	MEIE3103	Engineering Tools and Graphics	2	FPEL (0560 or 0600 or 0601 or 0602 or 0603 or 0604)	DR
	Total Credits		15		

Scheme I Semester 4 Fall 2025	Course Code	Course Title	Cr.	Pre-req./Co-requisite*	Cat.
	MEIE3102	Solid Mechanics	3	MEIE3100	AR
	MEIE3109	Product Design	3	MEIE3103	AR
	MEIE3141	Thermodynamics I	3	PHYS2108*	AR
	MEIE3162	Materials Science and Engineering	3	CHEM1071	AR
	MEIE3181	Electromechanical Systems	3	MATH2107, PHYS2108	AR
	Total Credits		15		

Scheme I Semester 5 Spring 2026	Course Code	Course Title	Cr.	Pre-req./Co-requisite*	Cat.
	MATH3171	Linear Algebra and Multivariate Calculus for Engineers	3	MATH2109, LANC2161	CR
	MEIE3122	Machine Dynamics	3	MEIE3100	AR
	MEIE3142	Thermodynamics II	3	MEIE3141	AR
	MEIE4183	Numerical Methods for Engineers	3	(COMP2002 or ENGR2217), MATH3171	AR
	MEIE4126	Instrumentation and Measurement	3	MEIE3181, MEIE3281	AR
Total Credits			15		

Scheme I Semester 6 Fall 2026	Course Code	Course Title	Cr.	Pre-req./Co-requisite*	Cat.
	MATH4174	Differential Equations for Engineers	3	MATH2109, LANC2161	CR
	MEIE4104	Design of Machine Elements	3	MEIE3102, MEIE3103	AR
	MEIE4141	Fluid Mechanics	3	PHY2108	AR
	MEIE4162	Manufacturing Processes	3	MEIE3162	AR
		University Elective	2		UE
Total Credits			14		

Scheme I Semester 7 Spring 2027	Course Code	Course Title	Cr.	Pre-req./Co-requisite*	Cat.
	MEIE4122	Engineering Systems and Control	3	MEIE3100, MATH4174	AR
	MEIE4144	Heat Transfer	3	MEIE4141, MEIE3141	AR
	MEIE4188	Data Analytics in Engineering	2	MEIE3281, (ENGR2217 or COMP2002)	AR
	MEIE4285	Engineering Economics	3	MATH2107	DR
	MEIE5149	Capstone Design	3	MEIE3109, MEIE4104	AR
Total Credits			14		

Scheme I Summer 2027	Course Code	Course Title	Cr.	Pre-req./Co-requisite*	Cat.
	ENGR4007	Industrial Training	0		CR
Total Credits			0		

Scheme I Semester 8 Fall 2027	Course Code	Course Title	Cr.	Pre-req./Co-requisite*	Cat.
	MEIE4123	Control Systems Design	2	MEIE4122	AR
	MEIE4163	Modern Materials and Manufacture	3	MEIE4162	AR
	MEIE5288	Innovation and Entrepreneurship	3	MEIE4285	DR
	MEIE5193*	Project I	2	MEIE4104, MEIE4144	AR
	MEIE5xxx	Major Elective 1	3		AE
	MEIE5xxx	Major Elective 2	3		AE
Total Credits			16		

* MEIE5193 is offered in Fall semesters ONLY.

Scheme I Semester 9 Spring 2028	Course Code	Course Title	Cr.	Pre-req./Co-requisite*	Cat.
		University Elective	2		UE
	MEIE5145	Design of Thermal Systems	3	MEIE3142, MEIE4144, MEIE4183	AR
	MEIE5194	Project II	3	MEIE5193	AR
	MEIE5xxx	Major Elective 3	3		AE
	MEIE5xxx	Major Elective 4	3		AE
	MEIE5xxx	Major Elective 5	3		AE
Total Credits			17		

Department of Mechanical and Industrial Engineering

Mechanical Engineering Study Plan

Cohort 2023 (Scheme II)

Scheme II FP1 Fall 2023	Course Code	Course Title	Cr.	Pre-req./Co-requisite*	Cat.
		General Foundation Program	0		UR
	Total Credits		0		

Scheme II FP2 Spring 2024	Course Code	Course Title	Cr.	Pre-req./Co-requisite*	Cat.
		General Foundation Program	0		UR
	Total Credits		0		

Scheme II Semester 1 Fall 2024	Course Code	Course Title	Cr.	Pre-req./Co-requisite*	Cat.
	HIST1010 or ISLM1010	Oman and Islamic Civilization or Islamic Culture	2		UR
	ENGR1501	Introduction to Engineering	1	FPEL (0560 or 0600 or 0601 or 0602 or 0603 or 0604)	CR
	ENGR1600	Workshop I	1	FPEL (0560 or 0600 or 0601 or 0602 or 0603 or 0604)	CR
	CHEM1071	General Chemistry for Engineering	3	FPEL (0560 or 0600 or 0601 or 0602 or 0603 or 0604) and FPMT0108	CR
	LANC2160	English for Engineering I	3	FPEL (0560 or 0600 or 0601 or 0602 or 0603 or 0604)	CR
	MATH2107	Calculus I	4	FPEL (0560 or 0600 or 0601 or 0602 or 0603 or 0604) and FPMT0108	CR
	Total Credits		14		

Scheme II Semester 2 Spring 2025	Course Code	Course Title	Cr.	Pre-req./Co-requisite*	Cat.
		University Elective	2		UE
	ARAB1060**	Arabic	2		UR
	SOCY1005**	Contemporary Omani State and People	2		UR
	LANC2161	English for Engineering II	3	LANC2160	CR
	MATH2109	Calculus II for Science and Eng.	3	MATH2107	CR
	PHYS2107	Physics for Engineering I	4	MATH2107*, FPEL (0560 or 0600 or 0601 or 0602 or 0603 or 0604) and FPMT0108	CR
	Total Credits		16		

** For non-Arabic speaking or non-Omanis students, please refer to Appendix A.

Scheme II Summer 2025***	Course Code	Course Title	Cr.	Pre-req./Co-requisite*	Cat.
		University Elective	2		UE
		College Elective	3	FPEL (0560 or 0600 or 0601 or 0602 or 0603 or 0604) and FPCS (0101 or 0102)	CE
	Total Credits		5		

*** Offering the summer semester is subject to the availability of the courses.

Scheme II Semester 3 Fall 2025	Course Code	Course Title	Cr.	Pre-req./Co-requisite*	Cat.
	PHYS2108	Physics for Engineering II	4	PHYS2107	CR
	MEIE3100	Engineering Mechanics	3	PHYS2107, MATH2107	AR
	MEIE3103	Engineering Tools and Graphics	2	FPEL (0560 or 0600 or 0601 or 0602 or 0603 or 0604)	DR
	MEIE3141	Thermodynamics I	3	PHYS2108*	AR
	MEIE3281	Probability and Statistics for Engineers	3	MATH2107	DR
	Total Credits		15		

Scheme II Semester 4 Spring 2026	Course Code	Course Title	Cr.	Pre-req./Co-requisite*	Cat.
	MATH3171	Linear Algebra and Multivariate Calculus for Engineers	3	MATH2109, LANC2161	CR
	MEIE3102	Solid Mechanics	3	MEIE3100	AR
	MEIE3109	Product Design	3	MEIE3103	AR
	MEIE3142	Thermodynamics II	3	MEIE3141	AR
	MEIE3162	Materials Science and Engineering	3	CHEM1071	AR
	MEIE3181	Electromechanical Systems	3	MATH2107, PHYS2108	AR
Total Credits			18		

Scheme II Semester 5 Fall 2026	Course Code	Course Title	Cr.	Pre-req./Co-requisite*	Cat.
	MATH4174	Differential Equations for Engineers	3	MATH2109, LANC2161	CR
	MEIE3122	Machine Dynamics	3	MEIE3100	AR
	MEIE4104	Design of Machine Elements	3	MEIE3102, MEIE3103	AR
	MEIE4141	Fluid Mechanics	3	PHYS2108	AR
	MEIE4162	Manufacturing Processes	3	MEIE3162	AR
	MEIE4183	Numerical Methods for Engineers	3	(COMP2002 or ENGR2217), MATH3171	AR
Total Credits			18		

Scheme II Semester 6 Spring 2027	Course Code	Course Title	Cr.	Pre-req./Co-requisite*	Cat.
	MEIE4122	Engineering Systems and Control	3	MEIE3100, MATH4174	AR
	MEIE4126	Instrumentation and Measurements	3	MEIE3181, MEIE3281	AR
	MEIE4144	Heat Transfer	3	MEIE4141, MEIE3141	AR
	MEIE4188	Data Analytics in Engineering	2	MEIE3281, (ENGR2217 or COMP2002)	AR
	MEIE4285	Engineering Economics	3	MATH2107	DR
	MEIE5149	Capstone Design	3	MEIE3109, MEIE4104	AR
Total Credits			17		

Scheme II Summer 2027	Course Code	Course Title	Cr.	Pre-req./Co-requisite*	Cat.
	ENGR4007	Industrial Training	0		CR
Total Credits			0		

Scheme II Semester 7 Fall 2027	Course Code	Course Title	Cr.	Pre-req./Co-requisite*	Cat.
	MEIE4123	Control Systems Design	2	MEIE4122	AR
	MEIE4163	Modern Materials and Manufacture	3	MEIE4162	AR
	MEIE5288	Innovation and Entrepreneurship	3	MEIE4285	DR
	MEIE5193*	Project I	2	MEIE4104, MEIE4144	AR
	MEIE5xxx	Major Elective 1	3		AE
	MEIE5xxx	Major Elective 2	3		AE
Total Credits			16		

* MEIE5193 is offered in Fall semesters ONLY.

Scheme II Semester 8 Spring 2028	Course Code	Course Title	Cr.	Pre-req./Co-requisite*	Cat.
		University Elective	2		UE
	MEIE5145	Design of Thermal Systems	3	MEIE3142, MEIE4144, MEIE4183	AR
	MEIE5194	Project II	3	MEIE5193	AR
	MEIE5xxx	Major Elective 3	3		AE
	MEIE5xxx	Major Elective 4	3		AE
	MEIE5xxx	Major Elective 5	3		AE
Total Credits			17		

Department of Mechanical and Industrial Engineering

Mechanical Engineering Study Plan

Cohort 2023 (COOP Scheme)

- The cooperative Training (COOP) Scheme is **optional**.
- Scheme I** Students can enroll in this scheme starting from Semester 8 (Fall 2027) after the foundation program.
- Scheme II** students can enroll in this scheme starting from Semester 7 (Fall 2027) after the foundation program.
- For enrollment terms, conditions, and registration procedure, please consult the Head of Department and the Assistant Dean for Training and Community Services Offices.

COOP Scheme Semester 1	Course Code	Course Title	Cr.	Pre-req./Co-requisite*	Cat.
	ENGR4007	Industrial Training	0		CR
	MEIE5001	Mechanical Program Cooperative Training I	0	ENGR4007*	AE
Total Credits			0		

COOP Scheme Semester 2	Course Code	Course Title	Cr.	Pre-req./Co-requisite*	Cat.
	MEIE5002	Mechanical Program Cooperative Training II	6	MEIE5001	AE
Total Credits			6		

COOP Scheme Semester 3	Course Code	Course Title	Cr.	Pre-req./Co-requisite*	Cat.
	MEIE4123	Control Systems Design	2	MEIE4122	AR
	MEIE4163	Modern Materials and Manufacture	3	MEIE4162	AR
	MEIE5288	Innovation and Entrepreneurship	3	MEIE4285	DR
	MEIE5193*	Project I	2	MEIE4104, MEIE4144	AR
	MEIE5xxx	Major Elective 1	3		AE
Total Credits			13		

*MEIE5193 is offered in Fall semesters ONLY.

COOP Scheme Semester 4	Course Code	Course Title	Cr.	Pre-req./Co-requisite*	Cat.
		University Elective	2		UE
	MEIE5145	Design of Thermal Systems	3	MEIE3142, MEIE4144, MEIE4183	AR
	MEIE5194	Project II	3	MEIE5193	AR
	MEIE5xxx	Major Elective 2	3		AE
	MEIE5xxx	Major Elective 3	3		AE
Total Credits			14		

Degree Plan
Cohort 2023
Appendix A
University Requirements for Non-Arabic or Non-Oman Students

No.	Cohorts 2018 and before	Credits	Cohorts 2018 and after	Credits	Notes
1	ARAB1001	3	ARAB1060	2	
2	SOCY1001	1	SOCY1005	2	For Omanis Only
3	--	--	SOCY1007	2	For Non-Omanis
4		ARAB1019		3	For non-Arabic Speaking Students. Offered only in Fall semesters

Notes:

- For the courses (SOCY1005, SOCY1007, HIST1010), the course materials and exams are in English for non-Arabic speaking students.
- Currently, there is no Arabic course with 2 credits for the non-Arabic speaking students of cohorts 2018 and after. Those students have to register the ARAB1019 as shown in the table above.

Department of Mechanical and Industrial Engineering
Degree Plan
Cohort 2023
LIST A
University Electives (UE) 6 Credits

Engineering students must register a humanity or social course (non-scientific and non-linguistic course) from any college as a University Elective. However, students are **NOT** allowed to register the following University Electives listed below.

No.	Course Code	Course Title	College
1	ENGGL1523	English Writing Skills	College of Arts
2	ENGR1524	English Reading Skills	College of Arts
3	ENGL1525	English Speaking and Listing Skills	College of Arts
4	CHEM1100	Everyday Chemistry	College of Science
5	COMP1210	Web Site Development	College of Science
6	CROP2020	Lab and Safety	College of Agriculture and Marine Science
7	MNGT2500	Entrepreneurship Creat. and Invo.	College of Economics and Political Sciences
8	MNGT2501	Entrepreneurship	College of Economics and Political Sciences
9	ECON1050	Introduction to Economics	College of Economics and Political Sciences
10	CHPE1000	Renewable Energy	College of Engineering
11	ECCE1000	Electricity Generation from Solar PV	College of Engineering
12	MEIE1000	Solar Calculations and Energy	College of Engineering
13	MCTE1000	Edutainment Robotic	College of Engineering
14	ECCE2000	Introduction to Artificial Intelligence	College of Engineering
15	COMP1003	Python for Everyone	College of Science

Department of Mechanical and Industrial Engineering
Degree Plan
Cohort 2023
LIST B
College Requirements (CR) 32 Credits

Course Code	Course Title	Credits	Pre-requisite / Co-requisite *
LANC2160	English for Engineering I	3	FPEL (0560 or 0600 or 0601 or 0602 or 0603 or 0604)
LANC2161	English for Engineering II	3	LANC2160
ENGR1501	Introduction to Engineering	1	FPEL (0560 or 0600 or 0601 or 0602 or 0603 or 0604)
ENGR1600	Workshop I	1	FPEL (0560 or 0600 or 0601 or 0602 or 0603 or 0604)
MATH2107	Calculus I	4	FPEL (0560 or 0600 or 0601 or 0602 or 0603 or 0604) and FPMT (0105 or 0109)
MATH2109	Calculus II for Science and Engineering	3	MATH 2107
MATH3171	Linear Algebra and Multivariate Calculus	3	MATH2109, LANC2161
MATH4174	Differential Equations for Engineers	3	MATH2109, LANC2161
PHYS2107	Physics for Engineering I	4	MATH2107*, FPEL (0560 or 0600 or 0601 or 0602 or 0603 or 0604) and FPMT (0105 or 0109)
PHYS2108	Physics of Engineering II	4	PHYS2107
CHEM1071	General Chemistry for Engineering	3	FPEL (0560 or 0600 or 0601 or 0602 or 0603 or 0604) and FPMT (0105 or 0109)
ENGR4007	Industrial Training	0	
Total		32	

Department of Mechanical and Industrial Engineering
Degree Plan
Cohort 2023
LIST C
College Electives (CE) 3 Credits

The course will be offered from the following courses subject to availability

Course Code	Course Title	Credits	Pre-requisite / Co-requisite*
COMP2002	Introduction to Computer Programming for Engineers	3	FPEL (0560 or 0600 or 0601 or 0602 or 0603 or 0604) and FPCS (0101 or 0102)
ENGR2217	Programming for Engineers	3	FPEL (0560 or 0600 or 0601 or 0602 or 0603 or 0604) and FPCS (0101 or 0102)

Department of Mechanical and Industrial Engineering
Degree Plan
Cohort 2023
LIST D
Department Requirements (DR) 11 Credits

Course Code	Course Title	Credits	Pre-requisite / Co-requisite*
MEIE3281	Probability and Statistics for Engineers	3	MATH2107
MEIE4285	Engineering Economics	3	MATH2107
MEIE3103	Engineering Tools and Graphics	2	FPEL (0560 or 0600 or 0601 or 0602 or 0603 or 0604)
MEIE5288	Innovation and Entrepreneurship	3	MEIE4285
Total		11	

Department of Mechanical and Industrial Engineering
Degree Plan
Cohort 2023
LIST E
Major Requirements (AR) 63 Credits

Course Code	Course Title	Credits	Pre-requisite / Co-requisite*
MEIE3100	Engineering Mechanics	3	PHYS2107
MEIE3102	Solid Mechanics	3	MEIE3100
MEIE3109	Product Design	3	MEIE3103
MEIE3122	Machine Dynamics	3	MEIE3100
MEIE3141	Thermodynamics I	3	PHYS2108*
MEIE3142	Thermodynamics II	3	MEIE3141
MEIE3162	Materials Science and Engineering	3	CHEM1071
MEIE3181	Electromechanical Systems	3	MATH2107, PHYS2108
MEIE4104	Design of Machine Elements	3	MEIE3100, MEIE3103
MEIE4122	Engineering Systems and Control	3	MEIE3100, MATH4174
MEIE4123	Control Systems Design	2	MEIE4122
MEIE4126	Instrumentation and Measurements	3	MEIE3181, MEIE3281
MEIE4141	Fluid Mechanics	3	PHYS2108
MEIE4144	Heat Transfer	3	MEIE3141, MEIE4141
MEIE4162	Manufacturing Processes	3	MEIE3162
MEIE4163	Modern Materials and Manufacturing	3	MEIE4162
MEIE4183	Numerical Methods for Engineers	3	(COMP2002 or ENGR2217), MATH3171
MEIE4188	Data Analytics in Engineering	2	MEIE3281 and (ENGR2217 or COOMP2002)
MEIE5145	Design of Thermal Systems	3	MEIE3142, MEIE4144, MEIE4183
MEIE5149	Capstone Design	3	MEIE3109, MEIE4104
MEIE5193	Project I	2	MEIE4104, MEIE4144
MEIE5194	Project II	3	MEIE5193
Total		63	

Department of Mechanical and Industrial Engineering
Degree Plan
Cohort 2023
LIST F
Major Electives (AE) 15 Credits

NOTES

- One 4000 or 5000 level course can be taken from another engineering program with the approval of the academic advisor and HoD.
 - Students of Scheme I or II should register for FIVE elective courses.
- Students of the COOP Scheme should register: Cooperative Training courses (MEIE5001 and MEIE5002) and THREE elective courses.
- The elective courses will be offered from the following and additional courses might be offered subject to availability.

Course Code	Course Title	Credits	Pre-requisite / Co-requisite *
MEIE5001	Mechanical Program Cooperative Training I	0	ENGR4007*
MEIE5002	Mechanical Program Cooperative Training II	6	MEIE5001
MEIE5013	Refrigeration and Air Conditioning	3	MEIE4144, MEIE3142
MEIE5128	Theory and Practice of Rotor Dynamics	3	MEIE3122
MEIE5019	Internal Combustion Engines and Control	3	MEIE3142
MEIE5101	Engineering Vibration	3	MEIE3100
MEIE5106	Pressure Vessel and Piping System Design	3	MEIE4104
MEIE5110	Applied Finite Element Methods	3	MEIE3102
MEIE5121	Modeling and Simulation of Engineering Systems	3	MATH4174
MEIE5122	Applied Multibody Dynamics	3	MEIE3122
MEIE5124	Condition Monitoring and Diagnosis	3	MEIE3122
MEIE5127	Analysis and Design of Control Systems	3	MEIE4122 or MCTE4450
MEIE5129	System Models and Identification	3	MEIE3281
MEIE5130	Mechatronics Systems and Applications	3	MEIE4126, MEIE4104
MEIE5131	Legged Locomotion of Robots and Animals	3	MEIE3122
MEIE5132	Smart Materials and Structures	3	MEIE4126 or MCTE4145
MEIE5141	Solar Energy Systems	3	MEIE4144
MEIE5142	Solar Thermal Processes	3	MEIE4144
MEIE5146	Renewable Energy	3	MEIE3142 or MCTE4230
MEIE5147	Energy Conservation and Management	3	MEIE3141
MEIE5148	Desalination	3	MEIE4144
MEIE5151	Fundamentals of Turbomachinery	3	MEIE3142, MEIE4141
MEIE5152	Fundamental of Thermal Energy Storage Sys.	3	MEIE3142
MEIE5162	Corrosion Engineering	3	MEIE4162
MEIE5165	Introduction to Fracture Mechanics	3	MEIE3162, (MEIE3102 or MCTE3230)
MEIE5166	Introduction to Nanotechnology Engineering	3	MEIE4162
MEIE5167	Mechanics of Composite Materials	3	MEIE3162, (MEIE3102 or MCTE3230)
MEIE5168	Introduction to Polymers	3	MEIE3161 or MEIE3162 or MEIE4263
MEIE5169	Fundamentals of Sustainable Engineering	3	MEIE4161, MEIE4162, MEIE4262, MEIE4163
MEIE5182	Fundamentals of Biomechanics	3	MEIE3102, MEIE3100
MEIE5183	Emerging Technologies in ME	3	MEIE4188 or MEIE4288
MEIE5184	Bioinspired Design for Engineers	3	
MEIE5190	Special Topics	3	
MEIE5264	CAD/CAM	3	MEIE3102, MEIE3103
MEIE5233	Maintenance and Reliability Engineering	3	MEIE3281
MEIE5287	Project Management	3	MEIE4161