

COLLEGE OF ENGINEERING TECHNOLOGY

- Civil Engineering Technology
- Mechatronics Engineering Technology
- Environmental Sustainability, Health and Safety
- Robotics & Manufacturing Engineering Technology
- Mechanical Engineering Technology
- Packaging Science

Table 1a: Undergraduate Program Schedule -

Civil Engineering Technology (CVET)-BS; 5/4/18

Effective Fall 2018

- Indicate academic calendar type: Semester Quarter Trimester Other (describe)

Term: Fall 1		Check course classification (s)				
Course Number & Title	CR	LAS	Maj	New	Prerequisite(s)	
CVET-140-Materials of Construction	2		2		Co-requisite: CVET-141	
CVET-141-Materials of Construction Lab	1		1		Co-requisite: CVET-140	
GE Perspective (LAS-P1) or Writing Seminar (LAS-F2)	3	3			NA	
MATH-111-Precalculus (LAS-P7A)	3	3			Students must have a math placement exam score of at least 40 or 3rd year student standing or C- or better in MATH-90	
PHYS-111- Physics I w/lab (LAS-P6)	4	4				
CVET-180-Civil Engineering Graphics	2		2		Co-requisite: CVET-181	
CVET-181-Civil Engineering Graphics Lab	1		1		Co-requisite: CVET-180	
Term credit total:	16	13	3			

Term: Spring 1		Check course classification (s)				
Course Number & Title	CR	LAS	Maj	New	Prerequisite(s)	
CVET-210 Statics	3		3		PHYS-111	
CVET-150 Computer Aided Design & Drafting	2		2		NA	
PHYS-112-Physics II	4	4			PHYS-111	
MATH-171-Calculus A (LAS-P7B)	3	3			C- or better in MATH-111 or C- or better in ((NMTH-260 or NMTH-272 or NMTH-275) and NMTH-220) or a math placement exam score greater than or equal to 60	
Writing Seminar (LAS-F2) or GE Perspective (LAS-P1)	3	3			NA	
Term credit total:	15	10	5			

Term: Fall 2		Check course classification (s)				
Course Number & Title	CR	LAS	Maj	New	Prerequisite(s)	
CVET-160-Surveying	3		3		Co-requisite: CVET-161	
CVET-161-Surveying Lab	1		1		Co-requisite: CVET-160	
COMM-142 Introduction to Technical Communication – writing intensive	3	3		X	NA	
MATH-172-Calculus B	3	3			C- or better in MATH-171	
GE Perspective (LAS-P2)	3	3			NA	
CVET-220-Strength of Materials	4		4		CVET-210	
Term credit total:	17	9	8			

Term: Fall 3		Check course classification (s)				
Course Number & Title	CR	LAS	Maj	New	Prerequisite(s)	
CVET-250-Hydraulics	3		3		CVET-210 Co-requisite: CVET-251	
CVET-251-Hydraulics Lab	1		1		Co-requisite: CVET-250	
CVET-300-Land Development Computer Applications	2		2		CVET-150, CVET-160/161, and CVET-180/181	
CVET-332-Structural Analysis with STAAD	4		4		CVET-220	
CVET-440-Foundation Engineering	3		3		CVET-240/241	
CHMG-142 General & Analytical Chemistry II	3	3		X	CHMG-141	
ENGT-299 Co-op Preparation	0		0			
Term credit total:	16	3	13			

Term: Spring 2		(Check course classification (s))				
Course Number & Title	CR	LAS	Maj	New	Prerequisite(s)	
CVET-170-Elements of Building Construction	3		3		NA	
CVET-230-Elementary Structures	3		3		CVET-220	
CVET-240-Elementary Soil Mechanics	3		3		CVET-220 Co-requisite: CVET-241	
CVET-241-Elementary Soil Mechanics Lab	1		1		Co-requisite: CVET-240	
MATH-211-Elements of Multivariable Calculus & Differential Equations	3	3			C- or better in MATH-172 or MATH-182	
CHMG-141 General & Analytical Chemistry I (LAS-P5)	3	3			Co-requisite: CHMG-145	
CHMG 145 General & Analytical Chemistry I Lab	1	1			Co-requisite: CHMG-141	
Term credit total:	17	7	10			

Term: Spring 3		(Check course classification (s))				
Course Number & Title	CR	LAS	Maj	New	Prerequisite(s)	
CVET-499- CO-OP	0		0		NA	
Term credit total:	0	0	0			

Term: Fall 4: STUDY ABROAD		Check course classification (s)					
Course Number & Title	CR	LAS	Maj	New	Prerequisite(s)		
GE Perspective: (LAS-P3)	3	3			NA		
Free Elective (1 of 2)	3				NA		
Free Elective (2 of 2)	3				NA		
GE-Immersion (LAS-I1)	3	3			NA		
GE Perspective: (LAS-P4)	3	3			NA		
Term credit total:	15	9					
Term: Fall 5		Check course classification (s)					
Course Number & Title	CR	LAS	Maj	New	Prerequisite(s)		
CVET-499- CO-OP	0		0				
Term credit total:	0	0	0				
Term: Spring 4		(Check course classification (s))					
Course Number & Title	CR	LAS	Maj	New	Prerequisite(s)		
Technical Elective (1 of 2)	3		3				
CVET-450-Principles of Water and Wastewater Treatment	3		3		CVET-250/251 and CHMG-142		
GE-Immersion (LAS-I2)	3	3			NA		
CVET-400-Transportation Engineering	2		2		CVET-300 Co-requisite: CVET-401		
CVET-401-Transportation Engineering Lab	1		1		CVET-300 Co-requisite: CVET-400		
Structural Design Elective (CVET-432)	3		3		CVET-230 and 332		
CVET-437-Dynamics in CET	2		2		CVET-332, MATH-172		
Term credit total:	17	3	14				
Term: Spring 5		Check course classification (s)					
Course Number & Title	CR	LAS	Maj	New	Prerequisite(s)		
CVET-500-CET Capstone – designated writing intensive course	3		3		5 th yr Civil Engineering Technology students or department permission		
Technical Elective (2 of 2)	3		3		NA		
GE Elective	3	3			NA		
Math or Science Elective	3	3			Dependent upon course selection		
GE-Immersion (LAS-I3)	3	3			NA		
Term credit total:	15	9	6				
Program Totals:	Credits: 128		Liberal Arts & Sciences: 60		Major (includes 6 hrs of technical electives): 62		Free Electives: 6

Cr: credits, LAS: liberal arts & sciences, Maj: major requirement, New: new course, Prerequisite(s): list prereq(s)

Note: CVET-499-CO-OP is also required in the summer of the 3rd and 4th yr.

Professional Options:

Construction Management

Choose 3 of the following:

- CVET-424 Building Information Modeling (Revit)
- CVET-461 Construction Cost Estimating I
- CVET-462 Construction Project Management
- CVET-464 Construction Planning, Scheduling and Control
- CVET-465 Contracts and Specifications
- CVET-505 Sustainable Building Design and Construction
- ESHS-225 Construction Safety

Structural Design

Required:

- CVET-431 Structural Design - Steel
- CVET-432 Structural Design - Reinforced Concrete

Choose 2 of the following:

- CVET-433 Structural Timber Design
- CVET-434 Design of Highway Bridges
- CVET-435 Pre-stressed Concrete
- CVET-436 Masonry Structures

Water Resources

Choose 3 of the following:

- CVET-423 Geospatial Information Systems for CETEMS
- CVET-451 Design of Water and Wastewater Treatment
- CVET-452 Groundwater Hydraulics
- CVET-453 Stormwater Management

Table 1a: Undergraduate Program Schedule: Mechatronics Engineering Technology (revised 6/13/2017); Effective Fall 2017

Study Abroad Timing – Students are encouraged to meet with their Academic Advisor to develop their own personalized plan and schedule for Study Abroad early in their program.

Term: Fall 1		Check course classification (s)				
Course Number & Title	CR	LAS	Maj	New	Prerequisite(s)	
MCET-101 Fundamentals of Engineering	3		3			
MCET-150 Engineering Communication And Tolerancing (title change)	3		3			
MFET-105 Machine Tools Lab	1		1			
MATH-171 Calculus A (LAS-P7A)	3	3			MATH-111 C- or better or >60% on Math Placement Exam	
GE- Elective	3	3				
UWRT-150 FYW Writing Seminar	3	3				
Term credit total:	16	9	7			
Term: Fall 2 STUDY ABROAD		Check course classification (s)				
Course Number & Title	CR	LAS	Maj	New	Prerequisite(s)	
MCET-220 Principles of Statics	3		3			
MFET-120 Manufacturing Processes	3		3			
MATH-211 Elements of Multivariable Calculus & Differential Equations	3	3			MATH-172 or MATH-182 (C- or better)	
PHYS-112 – College Physics	4	4			PHYS-111	
EEET-121 AC Circuits	3		3		EEET-111/112 (C- or better) Co-req: EEET-122, MATH-171	
EEET-122 AC Circuits Lab	1		1		Co-req: EEET-121, MATH-171	
Term credit total:	17	7	10			
Term: Fall 3		Check course classification (s)				
Course Number & Title	CR	LAS	Maj	New	Prerequisite(s)	
STAT-146 Introduction to Statistics 2	4	4			STAT-145	

Term: Spring 1		Check course classification (s)				
Course Number & Title	CR	LAS	Maj	New	Prerequisite(s)	
MCET-110 Foundations of Metals	2		2		Co-req: MCET-111	
MCET-111 Characterization of Metals Lab	1		1		Co-req: MCET-110	
EEET-111 DC Circuits	3		3		MATH-111, Co-req: EEET-112	
EEET-112 DC Circuits Lab	1		1		Co-req: EEET-111	
PHYS-111 College Physics (LA-P5)	4	4				
MATH-172 Calculus B (LAS-P7B)	3	3			MATH-171 (C- or better)	
COMM-203 Effective Technical Communications	3	3				
Term credit total:	17	10	7			
Term: Spring 2		Check course classification (s)				
Course Number & Title	CR	LAS	Maj	New	Prerequisite(s)	
EMET-290 Mechanics for EMET	3		3		MCET-220 (C- or better)	
EEET-225 Electronic Amplifiers	2		2		EEET-121/122 Co-req: EEET-226	
EEET-226 Electronic Amplifiers Lab	1		1		Co-req: EEET-225	
STAT-145 Introduction to Statistics I	3	3			MATH-101 or MATH-111 or >55% on Math Placement Exam	
CPET-121 Computational Problem Solving I (LAS)	3	3				
GE-Perspective (LAS-P1)	3	3				
Term credit total:	15	9	6			
Term: Spring 3		Check course classification (s)				
Course Number & Title	CR	LAS	Maj	New	Prerequisite(s)	
EMET-499 EMET Co-op	0				ENGT-299	

MFET-340 Automation Control Systems	2		2		PHYS-112 Co-req: MFET-341
MFET-341 Automation Control Systems Lab	1		1		Co-req: MFET-340
MCET-210 Foundations of Non-Metallic Materials	2		2		MCET-110/111 or NETS 110/111, Co-req: MFET-211
MCET-211 Characterization of Non-Metallic Materials Lab	1		1		Co-req: MFET-210
EEET-247 Microprocessors & Digital Systems	2		2		MATH-111 or MATH-171 or MATH-181 and CPET-121, Co-req: EEET-248
EEET-248 Microprocessors & Digital Systems Lab	1		1		MATH-111 or MATH-171 or MATH-181 and CPET-121 Co-req: EEET-247
GE-Perspective (LAS-P2)	3	3			
ENGT-299 Career Seminar	0				2 nd year status
Term credit total:	16	7	9		
Term: Fall 4		Check course classification (s)			
Course Number & Title	CR	LAS	Maj	New	Prerequisite(s)
EEET-241 Electric Machines & Transformers	2		2		EEET-121/122, Co-req: EEET-242
EEET-242 Electric Machines & Transformers Lab	1		1		, Co-req: EEET-241
MCET-430 Thermal Fluid Systems I	3		3		PHYS-112 (C- or better)
GE-Immersion (LA-I1)	3	3			
MFET-436 Engineering Economics	3		3		MATH-111 or higher
CHMG-131 General Chemistry for Engineers (LA-P6)	3	3			
Term credit total:	15	6	9		
Term: Summer 4		Check course classification (s)			
Course Number & Title	CR	LAS	Maj	New	Prerequisite(s)
EMET-499 EMET Co-op	0				ENGT-299
Term credit total:	0	0	0		
Term: Fall 5		Check course classification (s)			
Course Number & Title	CR	LAS	Maj	New	Prerequisite(s)
EMET-499 EMET Co-op	0				ENGT-299
Term credit total:	0	0	0		

Term credit total:	0	0	0		
Term: Summer 3					
Check course classification (s)					
EMET-499 EMET Co-op	0			ENGT-299	
Term credit total:	0	0	0		
Term: Spring 4					
Check course classification (s)					
Course Number & Title	CR	LAS	Maj	New	Prerequisite(s)
EMET-419 Experimental Methods for EMET (Writing Intensive)	3		3		(EMET-290 or MCET-320), (STAT-145 or MATH-251) and EEET-247
MCET-530 Thermal Fluid Systems II	3		3		MCET-430 (C- or better)
EEET-427 Control Systems	4		4		MATH-211, CPET-251/252 OR EEET 247/248
GE-Immersion (LA-I2)	3	3			
GE-Perspectives (LA-P3)	3	3			
Term credit total:	16	6	10		
Term: Spring 5					
Check course classification (s)					
Course Number & Title	CR	LAS	Maj	New	Prerequisite(s)
GE-Perspectives (LA-P4)	3	3			
GE-Immersion (LA-I3)	3	3			
Free Elective 1	3		3		
Free Elective 2	3		3		
Technical Elective 1	3		3		
Term credit total:	15	6	9		

Program Totals:

Credits: 127

Liberal Arts & Sciences: 60

Major: 61

Elective & Other: 6

Cr: credits

LAS: liberal arts & sciences

Maj: major requirement

New: new course

Prerequisite(s): list prerequisite(s) for the noted courses

**Table 1a: Undergraduate Program Schedule CAST
2018-2019**

Term: Fall 1		Check course classification (s)				
Course Number & Title	CR	LAS	Maj	New	Prerequisite(s)	
ESHS-100-ESHS Seminar	3		X			
First year writing	3	X				
MATH-161-Applied Calc (LAS-P7A)	4	X			MATH-101 or 111 or 131, or a score of at least 60% on the RIT Math Placement Exam	
CHMG-141-General & Analytical Chemistry I,	3	X			Co-requisite: CHMG-145	
CHMG-145-General & Analytical Chemistry I Lab (LAS-P5)	1				Co-requisite: CHMG-141	
LAS-P1	3	X				
Term credit total:	17	14	3			
Term: Fall 2		Check course classification (s)				
Course Number & Title	CR	LAS	Maj	New	Prerequisite(s)	
ESHS-200- Environmental Geology (GE Other)	3	X			Co-requisite: ESHS-201 course.	
ESHS-201- Environmental Monitoring & Measurement I	2		X		CHMG-111 Co-requisite: ESHS-200	
PHYS-112-College Phys II w/lab (GE Other)	4	X			PHYS-111	
BIOL-101 General Biology I	3					
BIOL-103 General Biology I Lab (GE Other)	1	X				
TCOM-327 EHS Communication	3		X			
Term credit total:	16	11	5			
Term: Spring 1		Check course classification (s)				
Course Number & Title	CR	LAS	Maj	New	Prerequisite(s)	
ESHS-150-Principles of ESHS	3		X			
PHYS-111-College Phys I w/lab (LAS-P6)	4	X				
CHMG-142- General & Analytical Chemistry II,	3	X			CHMG-141 or 131 Co-requisite: CHMG-146	
CHMG-146- General & Analytical Chemistry II Lab (other GenEd)	1				CHMG-141 and CHMG-145. Co-requisite: CHMG-142	
LAS P-3	3	X				
LAS P2	3	X			NA	
Term credit total:	17	14	3			
Term: Spring 2		Check course classification (s)				
Course Number & Title	CR	LAS	Maj	New	Prerequisite(s)	
ESHS-250-Intro to Hydrology	3		X		PHYS-111 or PHYS-211 or PHYS-211A, and ESHS-200 Co-requisite: ESHS-251	
ESHS-251- Environmental Monitoring & Measurement II	2		X		Co-requisite: ESHS-250	
ESHS-310-Solid & Hazardous Waste Mgmt	3		X		ESHS-150, CHMG-141,142	
ESHS-290-Social Responsibility & Env. Sustainability (Writing intensive)	3		X			
ESHS-320-Occupational Safety	3		X		ESHS-150, CHMG-141, PHYS-111	
Term credit total:	14	4	11			

Term: Fall 3		Check course classification (s)					
Course Number & Title	CR	LAS	Maj	New	Prerequisite(s)		
ESHS-330-Industrial Wastewater Mgmt	3		X		CHMG-141, CHMG-142, ESHS-150		
ESHS-460-EHS Accident Causation & Prevention	3		X		ESHS-320, 4 th or 5 th yr status		
ESHS-511-Occupational Health	3		X		CHMG-141, BIOL-101/103, ESHS-150 Co-req: ESHS-512		
ESHS-512-Occupational Health Lab	1		X		CHMG-141 Co-requisite: ESHS-511		
Gen Ed Immersion 1	3	X			NA		
STAT-145-Intro to Stat I (LAS-P7B)	3	X			MATH-101 or MATH-111 or a math placement exam score of at least 55.		
ENGT-299 Career Seminar (Co-op Prep)	0				2 nd year status		
Term credit total:	16	9	7				
Term: Fall 4 STUDY ABROAD		Check course classification (s)					
Course Number & Title	CR	LAS	Maj	New	Prerequisite(s)		
General Education Elective	3	X			NA		
Professional Elective	3		X				
Gen Ed Immersion 3	3	X					
Free Elective	3		X				
Gen Ed Immersion 2	3	X					
Term credit total:	15	9	6				
Term: Fall 5		Check course classification (s)					
Course Number & Title	CR	LAS	Maj	New	Prerequisite(s)		
ESHS-499- CO-OP	0		X		ENGT-299		
Term credit total:	0	0	0				
Term: Spring 3		Check course classification (s)					
Course Number & Title	CR	LAS	Maj	New	Prerequisite(s)		
ESHS-499- CO-OP	0		X		ENGT-299		
Term credit total:	0	0	0				
Term: Spring 4		Check course classification (s)					
Course Number & Title	CR	LAS	Maj	New	Prerequisite(s)		
Professional Elective	3		X				
ESHS-480-EHS Law	3		X		4 th or 5 th yr students		
ESHS-525-Air Emissions Mgmt.	3		X		CHMG-141, ESHS-150		
BIOL-102 General Biology II	3						
BIOL-104 General Biology II Lab	1	X					
Professional Elective	3		X				
Term credit total:	16	3	12				
Term: Spring 5		Check course classification (s)					
Course Number & Title	CR	LAS	Maj	New	Prerequisite(s)		
ESHS-515-Corp. EHS Mgmt.	3		X		ESHS-460, ESHS-480, 5 th yr status		
ESHS-590-Capstone Project	3		X		ESHS-290, 5 th yr status		
Professional Elective	3		X				
LAS P-4	3	X					
Free Elective	3						
Term credit total:	15	3	9				
Program Totals:	Credits: 126	Liberal Arts & Sciences: 61			Major (includes 12 hrs of professional electives): 59		Free Electives: 6

Cr: credits, LAS: liberal arts & sciences, Maj: major requirement, New: new course, Prerequisite(s): list prereq(s)

Note: ESHS-499-CO-OP is also required in the summer of the 3rd and 4th yr.

Options:

Alternative energy

EEET-251	Clean Energy Power Systems
EEET-252	Clean Energy Power Systems Lab
EEET-351	Solar Photovoltaic Applications
EEET-352	Solar Photovoltaic Applications Lab
EEET-353	Fuel Cell Systems
EEET-354	Fuel Cell Systems Lab

Occupational health and safety

ESHS-225	Construction Safety
ESHS-501	Fire Protection
ESHS-530	Mechanical and Electrical I Safeguarding
ESHS-550	Project Management
ESHS-465	Product Stewardship
ESHS-570	EHS Risk Assessment, Management and Communication

Surveying and geospatial analysis

CVET-160	Surveying
CVET-161	Surveying Laboratory
CVET-423	GIS for CETEMS
ISTE-382	Introcustion for Geospatial Technologies

Table 1a: Undergraduate Program Schedule: Robotics & Manufacturing Engineering Technology (MFET) revised 6/13/2017; Effective Fall 2017

Possible Study Abroad Timing – Students are encouraged to meet with their Academic Advisor to develop their own personalized plan and schedule for Study Abroad early in their program.

▪ Indicate academic calendar type: V_Semester Quarter Trimester Other (describe)

Term: Fall 1		Check course classification (s)				Term: Spring 1		(Check course classification (s))			
Course Number & Title	CR	LAS	Maj	New	Prerequisite(s)	Course Number & Title	CR	LAS	Maj	New	Prerequisite(s)
MCET-101 Fundamentals of Engineering	3		3			MCET-110 Foundations of Metals	2		2		Co-req: MCET-111
MFET-120 Manufacturing Processes	3		3			MCET-111 Characterization of Metals Lab	1		1		Co-req: MCET-110
GE-Perspective (LAS-P1)	3	3				MCET-150 Engineering Communication and Tolerancing (title change)	3		3		
MATH-171 Calculus A (LAS-P7A)	3	3			MATH-111 C or better or >60% on Math Placement Exam	UWRT-150 FYW Writing Seminar	3	3			
First Year LAS Elective (LAS-F1)	3	3				PHYS-111 College Physics I (LAS-P5)	4	4			
MFET-105 Machine Tools Lab	1		1			MATH-172 Calculus B (LAS-P7B)	3	3			MATH-171 (C- or better)
Term credit total:	16	9	7			Term credit total:	16	10	6		
Term: Fall 2		Check course classification (s)				Term: Spring 2		(Check course classification (s))			
Course Number & Title	CR	LAS	Maj	New	Prerequisite(s)	Course Number & Title	CR	LAS	Maj	New	Prerequisite(s)
MCET-220 Principles of Statics	3		3			MCET-221 Strength of Materials	4		4		MCET-220 (C- or better) Co-reg MCET-110
GE-Perspective (LAS-P2)	3	3				EEET-215 Circuits and Electronics	2		2		Math-111 or MATH-171 or MATH-181 Co-req: EEET-216
MATH-211 Multivariable Calculus & Differential Equations	3	3			MATH-172 or MATH-182 (C- or better)	EEET-216 Circuits and Electronics Lab	1		1		Co-req: EEET-215
PHYS-112 – College Physics II	4	4			PHYS-111	STAT-145 Introduction to Statistics I	3	3			MATH-101 or MATH-111 or >55% on Math Placement Exam
MCET-210 Foundations of Non-Metallic Materials	2		2		MCET-110/111 or NETS 110/111 Co-req: MCET-211	COMM-203 Effective Technical Communication	3	3			
MCET-211 Characterization of Non-Metallic Materials Lab	1		1		Co-req: MCET-210	GE-Perspectives (LA-P3)	3	3			
Term credit total:	16	10	6			Term credit total:	16	9	7		

Term: Fall 3		Check course classification (s)				Term: Spring 3		Check course classification (s)				
Course Number & Title	CR	LAS	Maj	New	Prerequisite(s)	Course Number & Title	CR	LAS	Maj	New	Prerequisite(s)	
STAT-146 Introduction to Statistics 2	4	4			STAT-145	MFET-499 MFET Co-op	0				ENGT-299	
MFET-340 Automation Control Systems	2		2		PHYS-112 Co-req: MFET-341	Term credit total:	0	0	0			
MFET-341 Automation Control Systems Lab	1		1		Co-req: MFET-340							
MFET-345 Electronics Manufacturing	2		2		Co-req: MFET-346							
MFET-346 Electronics Manufacturing Lab	1		1		Co-req: MFET-345							
GE-Immersion (LA-I1)	3	3				Term: Summer 3		Check course classification (s)				
Free Elective 1	3					Course Number & Title	CR	LAS	Maj	New	Prerequisite(s)	
ENGT-299 Career Seminar	0				2 nd year status	MFET-499 MFET Co-op	0		0		ENGT-299	
Term credit total:	16	7	6			Term credit total:	0	0	0			
Term: Fall 4		Check course classification (s)				Term: Spring 4		Check course classification (s)				
Course Number & Title	CR	LAS	Maj	New	Prerequisite(s)	Course Number & Title	CR	LAS	Maj	New	Prerequisite(s)	
MFET-420 Quality Engineering Principles	3		3		STAT-146 or MATH-251	MFET-450 Lean Production & Supply Chain Operations	3		3		STAT-145 or MATH-251	
MFET-445 Robotics & Automation (Writing Intensive)	2		2		MCET-220 (current students) or EMET-290 incoming 2017 first year students only Co-req: MFET-446	MFET-460 Integrated Design for Manufacture & Assembly	3		3		MFET-120	
MFET-446 Robotics & Automaton Lab	1		1		Co-req: MFET-445	Technical Elective 1	3		3			
MFET-436 Engineering Economics	3		3		MATH-111 or higher	GE-Immersion (LA-I3)	3	3				
CHMG-131 General Chemistry for Engineers (LAS-P6)	3	3				GE-Perspectives (LA-P4)	3	3				
GE-Immersion (LA-I2)	3	3										
Term credit total:	15	6	9			Term credit total:	15	6	9			
Term: Summer 4		Check course classification (s)				Term: Spring 5		Check course classification (s)				
Course Number & Title	CR	LAS	Maj	New	Prerequisite(s)	Course Number & Title	CR	LAS	Maj	New	Prerequisite(s)	
MFET-499 MFET Co-op	0		0		ENGT-299	MFET-580 Production Systems Design	3		3		MFET-340, MFET-445, MFET-460 Co-req: MFET-590	
Term credit total:	0	0	0			MFET-590 Production Systems Development	3		3		MFET-340/341, MFET-445/446, MFET-460 Co-req: MFET-580	
						Free Elective 2	3					
Term: Fall 5		Check course classification (s)				General Education Elective 1 (GE-E1)	3	3				
Course Number & Title	CR	LAS	Maj	New	Prerequisite(s)	Technical Elective 2	3		3			
MFET-499 MFET Co-op	0				ENGT-299	Term credit total:	15	3	9			
Term credit total:	0	0	0									
Program Totals:		Credits: 125		Liberal Arts & Sciences: 60		Major: 59		Elective & Other: 6				

Cr: credits LAS: liberal arts & sciences Maj: major requirement New: new course Prerequisite(s): list prerequisite(s) for the noted courses

Table 1 Undergraduate Program Schedule: Mechanical Engineering Technology (MCET) revised 6/13/2017; Effective Fall 2017

Possible Study Abroad Timing – Students are encouraged to meet with their Academic Advisor to develop their own personalized plan and schedule for Study Abroad early in their program.

Term Fall 1		(Check course classification (s))				
Course Number & Title	CR	LAS	Maj	New	Prerequisite(s)	
MCET-101 Fundamentals of Engineering	3		3			
MFET-120 Manufacturing Processes	3		3			
GE-Perspective (LAS-P1)	3	3				
MATH-171 Calculus A (LAS-P7A)	3	3			MATH-111 C- or better or >60% on Math Placement Exam	
First Year LAS Elective (LAS-F1)	3	3				
MFET-105 Machine Tools Lab	1		1			
Term credit total:	16	9	7			
Term: Fall 2		Check course classification (s)				
Course Number & Title	CR	LAS	Maj	New	Prerequisite(s)	
MCET-220 Principles of Statics	3		3			
GE-Perspective (LAS-P2)	3	3				
MATH-211 Multivariable Calculus & Differential Equations	3	3			MATH-172 or MATH-182 (C- or better)	
PHYS-112 – College Physics II	4	4			PHYS-111	
MCET-210 Foundations of Non-Metallic Materials	2		2		MCET-110/111 or NETS-110/111 Co-req: MCET-211	
MCET-211 Characterization of Non-Metallic Materials Lab	1		1		Co-req: MCET-210	
Term credit total:	16	10	6			
Term Spring 1		(Check course classification (s))				
Course Number & Title	CR	LAS	Maj	New	Prerequisite(s)	
MCET-110 Foundations of Metals	2		2		Co-req: MCET-111	
MCET-111 Characterization of Metals Lab	1		1		Co-req: MCET-110	
MCET-150 Engineering Communication and Tolerancing (title change)	3		3			
UWRT-150 FYW Writing Seminar (LAS-F2)	3	3				
PHYS-111 College Physics I	4	4				
MATH-172 Calculus B (LAS-P7B)	3	3			MATH-171 (C- or better)	
Term credit total:	16	10	6			
Term: Spring 2 STUDY ABROAD		(Check course classification (s))				
Course Number & Title	CR	LAS	Maj	New	Prerequisite(s)	
MCET-221 Strength of Materials	4		4		MCET-220 (C- or better) Co-req MCET-110	
EEET-215 Circuits and Electronics	2		2		MATH-111, or MATH-171, or MATH-181 Co-req: EEET-216	
EEET-216 Circuits and Electronics Lab	1		1		Co-req: EEET-215	
STAT-145 Introduction to Statistics I	3	3			MATH-101 or MATH-111 or >55% on Math Placement Exam	
COMM-203 Effective Technical Communications	3	3				
GE-Perspective (LAS-P3)	3	3				
Term credit total:	16	9	7			

Term: Fall 3		Check course classification (s)				
Course Number & Title	CR	LAS	Maj	New	Prerequisite(s)	
STAT-146 Introduction to Statistics II	4	4			STAT-145	
MCET-320 Mech Dynamics w Applications	3		3		MCET-220 (C- or better) Co-reg MATH-211	
CHEM-131 General Chemistry for Engineers (LA-P5)	3	3				
GE-Perspectives (LA-P4)	3	3				
MCET-330 Fluid Mechanics & Fluid Power	3		3		MCET-220	
ENGT-299 Career Seminar	0				2 nd year status	
Term credit total:	16	10	6			
Term: Fall 4		Check course classification (s)				
Course Number & Title	CR	LAS	Maj	New	Prerequisite(s)	
MCET-450 Mech Analysis & Design I	3		3		MCET-221 (C- or better) and MCET-320 (C- or better)	
MCET-400 Experimental Methods	3		3		MCET-221, MCET-320, and (MATH-251 or STAT-145) all C- or better	
MCET-430 Thermal Fluid Systems I	3		3		PHYS-112 (C- or better)	
GE-Immersion (LA-I1)	3	3				
Technical Elective 1	3		3			
Term credit total:	15	3	12			
Term: Summer 4		Check course classification (s)				
Course Number & Title	CR	LAS	Maj	New	Prerequisite(s)	
MCET-499 MCET Co-op	0				ENGT-299	
Term credit total:	0	0	0			
Term: Fall 4		Check course classification (s)				
Course Number & Title	CR	LAS	Maj	New	Prerequisite(s)	
MCET-499 MCET Co-op	0				ENGT-299	
Term credit total:	0	0	0			

Term: Spring 3		Check course classification (s)				
Course Number & Title	CR	LAS	Maj	New	Prerequisite(s)	
MCET-499 MCET Co-op	0				ENGT-299	
Term credit total:	0	0	0			
Term: Summer 3		Check course classification (s)				
Course Number & Title	CR	LAS	Maj	New	Prerequisite(s)	
MCET-499 MCET Co-op	0				ENGT-299	
Term credit total:	0	0	0			
Term: Spring 4		Check course classification (s)				
Course Number & Title	CR	LAS	Maj	New	Prerequisite(s)	
MCET-550 Mech Analysis & Design II	3		3		MCET-450 (C- or better) Co-req: MCET-551	
MCET-551 Mech Analysis & Design II Lab	1		1		Co-req: MCET-550	
MCET-530 Thermal Fluid Systems II	3		3		MCET-430 (C- or better)	
Technical Elective 2	3		3			
GE-Immersion (LA-I2)	3	3				
GE-Perspectives (LA-P6)	3	3				
Term credit total:	16	6	10			
Term: Spring 5		Check course classification (s)				
Course Number & Title	CR	LAS	Maj	New	Prerequisite(s)	
Technical Elective 3	3		3			
Technical Elective 4	3		3			
Free Elective 1	3					
Free Elective 2	3					
GE-Immersion (LA-I3)	3	3				
MCET-535 Thermal Fluid Systems Lab	2		2		Co-req: MCET-530	
Term credit total:	17	3	8			

Program Totals:	Credits: 128	Liberal Arts & Sciences: 60	Major: 62	Elective & Other: 6
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Cr: credits LAS: liberal arts & sciences Maj: major requirement New: new course Prerequisite(s): list prerequisite(s) for the noted courses

Table 1a: Undergraduate Program Schedule

Packaging Science BS

AY 2018-2019 revised 6/5/18

Term: Fall 1		Check course classification (s)				
Course Number & Title	CR	LAS	Maj	New	Prerequisite(s)	
First Year Writing LAS F1	3	X				
MATH 171 Calculus A LASP7A	3	X				
CHMG 141 General & Analytical Chemistry I. LAS	3	X		X	Co-req: CHMG 145	
CHMG 145 General & Analytical Chemistry I Lab LAS	1	X		X	Co-req: CHMG 141	
PACK 101 Intro. To Packaging	1		X			
PACK 151 Packaging Design I	3		X			
Term credit total:	14	10	4			
Term: Fall 2		Check course classification (s)				
Course Number & Title	CR	LAS	Maj	New	Prerequisite(s)	
General Education Perspective LASP3	3	X				
CHMG 201 Intro to Organic Polymer Tech.LAS	3	X			CHMG 141	
PHYS 111 College Physics I LASP6	4	X				
PACK 211 Packaging Metals & Plastics	3		X		Co-Req: PACK 101	
PACK 212 Packaging Paper & Glass	3		X		Co-Req: PACK 101	
Term credit total:	16	10	6			
Term: Fall 3		Check course classification (s)				
Course Number & Title	CR	LAS	Maj	New	Prerequisite(s)	
Immersion LAS	3	X				
MEDG 106 Microbiology LASP5	3	X				
STAT 146 Intro to Statistics II LAS	4	X			STAT 145	
MKTG 230 Marketing	3		X			
PACK 421 Packaging for Distribution	3		X		PACK 311, 312	
Term credit total:	16	10	6			
Term: Fall 4-STUDY ABROAD		Check course classification (s)				
Course Number & Title	CR	LAS	Maj	New	Prerequisite(s)	
Free Elective	3		X			
Free Elective	3		X			
General Education LASF2	3	X	X		PACK 311,312	
Packaging Elective	3		X			
Packaging Elective	3		X			
Term credit total:	15	3	9			
Program Totals:	Credits: 121		Liberal Arts & Sciences: 60			

Term: Spring 1		Check course classification (s)				
Course Number & Title	CR	LAS	Maj	New	Prerequisite(s)	
General Education Perspective LASP1	3	X				
MATH 172 Calculus B LASP7B	3	X			MATH 171	
CHMG 123 Chemistry of Materials LAS	3	X			CHMG 121 or 131 or 141	
PACK 152 Packaging Design II	3		X			
General Education Perspective LASP2	3	X				
Term credit total:	15	12	3		Co-Req: PACK 101	
Term: Spring 2		Check course classification (s)				
Course Number & Title	CR	LAS	Maj	New	Prerequisite(s)	
General Education Perspective LASP4	3	X				
STAT 145 Intro to Statistics I LAS	3	X			math placement exam score of at least 55.	
Environmental Elective- ENVS 101, or STSO 220, or STSO 421 LAS	3	X		X		
PACK 311 Containers I	3		X		PACK 151,211, 212 co-req PACK 152	
PACK 312 Containers II	3		X		PACK 151,211, 212 co-req PACK 152	
Term credit total:	15	9	6			
Term: Spring 3		Check course classification (s)				
Course Number & Title	CR	LAS	Maj	New	Prerequisite(s)	
Immersion LAS	3	X				
PACK 430 Packaging Regulations	3		X		PACK 311, 312	
PACK 422 Dynamics and Protective Packaging	3		X		PACK 421	
PACK 420 Technical Communications	3		X		FYW	
PACK 470 Food Packaging	3		X			
Term credit total:	15	3	12			
Term: Spring 4		Check course classification (s)				
Course Number & Title	CR	LAS	Maj	New	Prerequisite(s)	
Immersion LAS	3	X				
Pac Printing Elective choose from: MAAT 368 or 541 or 558	3		X			
PACK 481 Packaging for Marketing and End Use	3		X		PACK 421	
PACK 471 Packaging Supply Chain or DECS 310 Operation Management	3		X		PACK 421	
Packaging Elective	3		X			
Term credit total:	15	3	9			
Major: 55	Elective & Other: 6					

Cr: credits LAS: liberal arts & sciences Maj: major requirement New: new course Prerequisite(s): list prerequisite(s) for the noted courses

The packaging science major requires two blocks of cooperative education in addition to course work.