Associate in Science in Engineering Science – Mechanical Concentration [Note 1]
at Montgomery County Community College
to the Bachelor of Science in Mechanical Engineering
at Temple University College of Engineering
(Effective Fall 2021)

MCCC Recommended Course			Temple Equivalent	
First Semester		***Credits***	***First Semester***	
ENG 101	English Composition I	3	ENG 0802	Analytical Reading and Writing
EGR 111	Engineering Computations	3	CIS 1057 [Note 2]	Computer Programming in C
MAT 190	Calculus I	4	MATH 1041	Calculus I
EGR 102	Introduction to Engineering	3	ENGR 1101	Introduction to Engineering & Engineering Technology
PHY 151	Principles of Physics I	4	PHYS 1061	Elementary Classical Physics I
	Semester Total:	**17**		
Second Semester			***Second Semester***	
ENG 102	English Composition II	3	ENG L***	Lower Level Elective- ENG
MAT 201	Calculus II	4	MATH 1042	Calculus II
PHY 152	Principles of Physics II	4	PHYS 1062	Elementary Classical Physics II
Elective: Oral & Writing Communications	See MCCC's Requirements	3		Dependent upon course selection [Note 6]
EGR 115	Engineering Graphics	3	ENGR 1117 [Note 3]	Engineering Graphics
	Semester Total:	**17**		
Third Semester			***Third Semester***	
MAT 202	Calculus III	4	MATH 2043	Calculus III
CHE 151	Principles of Chemistry I	4	CHEM 1031/ CHEM 1033 [Note4]	General Chemistry I / General Chemistry Laboratory I
EGR 211	Linear Electrical Systems I	4	ECE 2312 [Note 5] & ECE 2313	Electrical Engineering Science I & Electrical Engineering Science Laboratory I
EGR 203	Engineering Statics	3	ENGR 2331	Engineering Statics
	Semester Total:	**15**		
Fourth Semester			***Fourth Semester***	
MAT 223	Differential Equations	4	MATH 3041	Differential Equations
Elective: Aesthetic Sensibility	See MCCC's Requirements	3		Dependent upon course selection [Note 6]
Elective: Cultural Awareness and Diversity	See MCCC's Requirements	3		Dependent upon course selection [Note 6]
EGR 204	Engineering Dynamics	3	ENGR 2332	Engineering Dynamics
EGR 213	Mechanics of Materials	3	ENGR 2333	Mechanics of Solids
	Semester Total:	**16**		
	Total Credits Taken	**65**		

Notes:

1) Students who transfer to Temple with an A.S. in Engineering Science-Mechanical Concentration have satisfied the terms of the Temple- MCCC GenEd-to-GenEd transfer agreement and have completed the General Education requirements necessary to graduate from Temple University.
2) Students with transfer credit for CIS 1057 will be waived from ENGR 1102: Introduction to Engineering through a

DARS exception.

3) EGR 115: Engineering Graphics transfers to Temple as ENGR 1117: Introduction to Engineering and Engineering Technology. ENGR 1117 will satisfy MEE 1117: Fundamentals of Mechanical Engineering Design through a DARS exception.
4) CHE 151: Principles of Chemistry I transfers to Temple as CHEM 1031: General Chemistry I and CHEM 1033: General Chemistry I Laboratory. CHE 151 will satisfy the major requirement for CHEM 1035: Chemistry for Engineers at Temple through DARS exception.
5) EGR 211: Linear Electrical Systems I transfers to Temple as ECE 2312: Electrical Engineering Science I and ECE 2313: Electrical Engineering Science Laboratory I. Students transferring with EGR 211 will satisfy the Temple requirement of ECE 2112: Electrical Devices and Systems I and ECE 2113: Electrical Devices and Systems Laboratory I through DARS exception. These are required courses for students in the B.S. Mechanical Engineering major.
6) Students are encouraged to consult Temple's Transfer Equivalency Tool to see how selected coursework might transfer: http://admissions.temple.edu/transfer-equivalency-tool

If the suggested classes are successfully completed and an Associate of Science in Engineering Science- Mechanical

Concentration is awarded, the remaining four semesters for the **Bachelor of Science in Mechanical Engineering** are as follows:

Remaining Requirements at Temple University		
Fifth Semester		***Credits***
MEE 3011	Analysis & Computation of Linear Systems	3
ENGR 3571	Classical and Statistical Thermodynamics	3
ENGR 2196	Technical Communication [WI]	3
MEE 2305	Instrumentation & Data Acquisition Lab	1
ENGR 3001	Engineering Economics	3
ENGR 3201	Material Science for Engineers	3
	Semester Total:	**16**
Sixth Semester		
MEE 3301	Machine Theory and Design	3
ENGR 3553	Mechanics of Fluids	3
Free Elective	Dependent upon course selection	3
MEE 3506	Fluids and Energy Laboratory	1
ENGR 4169	Engineering Seminar	1
MEE Elective	Technical Elective #1	3
MEE 3305	Materials Laboratory	1
Free Elective	Dependent upon course selection	2
	Semester Total:	**17**
Seventh Semester		
ENGR 4177	Senior Design Project I for Mechanical Engineering	2
MEE 4572	Heat and Mass Transfer	3
MEE 3117	Computer-Aided Mechanical Design	3
MEE 4422/MEE4405 OR MEE 4571/ MEE 4506	Mechanical Vibrations/ Vibrations Laboratory OR Advanced Thermodynamics and Combustion/ Energy Conversion Laboratory	4
Free Elective	Dependent upon course selection	3
	Semester Total:	**15**
Eighth Semester		
ENGR 4296	Senior Design Project II [WI]	3
MEE Elective	Technical Elective #2	3
MEE Elective	Technical Elective #3	3
Free Elective	Dependent upon course selection	3
Free Elective	Dependent upon course selection	3
	Semester Total:	**15**
	Credits transferred as part of the A.S. Engineering Science	**65**
	Remaining B.S. Mechanical Engineering Requirements to complete at Temple	**63**
	Total Credits for the B.S. in Mechanical Engineering:	**128**

Notes: *Students following this plan are under the GenEd-to-GenEd General Education program.*

a) Students who transfer with an A.S. in Engineering Science- Mechanical Concentration from Montgomery County Community College have satisfied the requirements for GenEd-to-GenEd transfer.

b) All inquiries about the undergraduate program and application are handled through the Office of Undergraduate Admissions. If you have specific questions about your application or the admission process, please call 215-204-7200.

c) All inquiries specific to the Engineering program and requirements should be directed to the College of Engineering, Shawn Fagan, 215-204-8825, shawn.fagan@temple.edu.
d) Temple University requires that all undergraduate degree candidates complete 45 hours of the last 60 hours of the degree or program as matriculated students at Temple University. If a matriculated student previously took Temple courses on a non-matriculated basis, those courses are counted towards this requirement.
e) Per Temple's Transfer Policy for Permission to Complete a Course at Another Institution after Matriculation, students who transfer 60 credits or more cannot receive permission to transfer additional course work after matriculation.