Associate in Science in Engineering Science – Mechanical Concentration
at Montgomery County Community College
to the Bachelor of Science in Mechanical Engineering
at Temple University of the Commonwealth System of Higher Education
(Effective Fall 2016)

Montgomery County Community College Recommended Course			Temple University 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	Computer Programming in C Note 1
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***	English Elective
MAT 201	Calculus II	4	MATH 1042	Calculus II
PHY 152	Principles of Physics II	4	PHYS 1062	Elementary Classical Physics II
SPC 120	Public Speaking	3	STRC 1111	Public Speaking
EGR 115	Engineering Graphics	3	ENGR 1117	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 Note 2 AND CHEM 1033	General Chemistry I AND General Chemistry Laboratory I
EGR 211	Linear Electrical Systems I	4	ECE 2312 Note 3 AND ECE 2313	Electrical Engineering Science I AND Electrical Engineering Science Laboratory I
EGR 203	Engineering Statics	3	ENGR 2331	Engineering Statics
Elective	Core Goal 10: Dependent upon course selection	2-3	Elective	Dependent upon course selection
	Semester Total:	17-18		
Fourth Semester			***Fourth Semester***	
MAT 223	Differential Equations	4	MATH 3041	Differential Equations
HIS 101	History of Western Civilization I	3	HIST L***	Lower Level Elective
PHI 101	Introduction to Ethics	3	PHIL L***	Philosophy Lower Level Elective
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	67-68		

Notes:

1) Students with transfer credit for CIS 1057 will be waived from ENGR 1102: Introduction to Engineering, via

DARS exception.

2) 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.
3) 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.

* Students who complete the A. S. in Engineering Science at Montgomery County Community College are included in the Montgomery County Community College-Temple GenEd-to-GenEd Transfer Agreement, and therefore, have satisfied all of the GenEd requirements at Temple. Students should work with their MCCC advisor to select courses to fulfill the MCCC degree requirements**. Students who wish to qualify for the Dual Admissions agreement and a possible scholarship should complete the letter of intent before earning 30 credits at Montgomery County Community College.**

If the suggested classes are successfully completed and an Associate of Science in Engineering Science 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 2011	Linear Systems	3
ENGR 3571	Classical and Statistical Thermodynamics	3
ENGR 2196	Technical Communication	3
MEE 3301	Machine Theory & Design I	3
MEE 3305	Materials Laboratory	1
ENGR 3201	Material Science for Engineers	3
	Semester Total:	**16**
Sixth Semester		
MEE 3421	Dynamic Systems	3
ENGR 3553	Mechanics of Fluids	3
ENGR 3117	Computer-Aided Design (CAD)	3
MEE 3506	Fluids and Energy Laboratory	1
ENGR 4169	Engineering Seminar	1
MEE Elective	Technical Elective #1	3
MEE 2305	Measurements & Dynamics Laboratory	1
	Semester Total:	**15**
Seventh Semester		
ENGR 4177	Senior Design Project I for Mechanical Engineering	2
MEE 4572	Heat and Mass Transfer	3
ENGR 3001	Engineering Economics	3
MEE Elective	Technical Elective #2 and/or Lab Note 1	4
Free Elective	Dependent upon course selection	3
	Semester Total:	**15**
Eighth Semester		
ENGR 4296	Senior Design Project II	3
MEE Elective	Technical Elective #4	3
MEE Elective	Technical Elective #3 and/or lab Note 1	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	**67-68**
	Remaining B.S. Mechanical Engineering Requirements to complete at Temple	**61**
	Total Credits for the B.S. in Mechanical Engineering:	**128-129**

Notes:

1) Student in the Bachelor of Science in Mechanical Engineering Program must take either of the following sequence of courses:
MEE 4422 Mechanical Vibrations (technical elective; offered every Fall) and MEE 4405 Vibrations and Controls Laboratory (lab elective)

OR MEE 4571 Advanced Thermodynamics and Combustion (technical elective; offered every fall semester) and MEE 4506 Energy Conversion Laboratory (lab elective)

DARS EXCEPTIONS TO BE ENTERED BY TEMPLE ACADEMIC ADVISOR

Undergraduate students and their advisors use the Degree Audit Reporting System to plan and track a student's academic career at Temple. DARS works in concert with our Banner Student information system to show how a student's course work to date, including transferred courses, will fulfill the academic requirements necessary to complete a degree in the major field of study

For the DARS exceptions to be processed, students should bring a copy of their final MCCC transcript to their first advising appointment with their Temple Academic Advisor and indicate that they have been following an agreement. The final transcript must show the degree awarded and a conferral date. Official copy of the final transcript must be sent to the Temple Admissions Office.

1) Temple's CHE 1031 satisfies CHEM 1035
2) Temple's ECE 2312 and ECE 2313 satisfies ECE 2112 AND ECE 2113

ABBREVIATIONS KEY

MEE – Mechanical Engineering
ENGR – Engineering
T*** General Transfer Elective
L*** Lower Level Elective (1000-1999 level course)

To find the online application:

Go to temple.edu/undergrad
Click on "Apply" on the gray bar across the top
Click on "Transfer Students" on the left hand side (which will take you to an online application)

Inquiries about the undergraduate program and application are handled through the Office of Admissions (Tel: 215-204-7200/Email: askanowl@temple.edu.)

Inquiries about the Bachelor of Science in Mechanical Engineering program or specific course requirements can be directed to Shawn Fagan (Director, Undergraduate Studies, College of Engineering; Tel: 215-204-8825/Email: sfagan@temple.edu).