



Messiah College-Philadelphia Campus Articulation Statement



ENGR: Mechanical Concentration

Update 03.07.05

The Messiah College department of engineering approves that the following Temple courses taken through the Philadelphia Campus meet the listed requirements and electives for the engineering mechanical engineering concentration for the major. To review the semesters that these courses *usually* are offered, refer to the course descriptions provided in Temple University's online undergraduate bulletin at <http://www.temple.edu/bulletin>. Course descriptions indicate that a course is offered a particular semester using the following method:

- F in the course listing means the course is offered in the Fall
- S in the course listing means the course is offered in the Spring
- SS in the course listing means the course is offered during one of Temple's Summer Sessions

SECOND YEAR: FALL			
Messiah Course	# Cr	Temple Course	# Cr
MAT 211 Calculus III	4	MAT 0127 Calculus III	4
MAT 261 Linear Algebra	3	MAT 0147 Linear Algebra	3
PHY 212 Physics II	4	PHYC088 Elementary Classical Physics II	4
ENGR 231 Engineering Statics	3	ENGR 0131 Engineering Statics	3
General Education	3	At Philadelphia Campus: BIB 200, WorldViews, CB, Ethics	3
SECOND YEAR: SPRING			
Messiah Course	# Cr	Temple Course	# Cr
MAT 308 Differential Equations	3	MAT 0251 Differential Equations I	3

ENGR 254 Materials Engineering	4	ENGR W233 Materials Science for Engineers(3)+ MECH ENGR 0005 Materials Laboratory(1)	4
ENGR 242 Experimental Methods	3	MAT 0234 Intro to Mathematical Statistics	3
ENGR 232 Dynamics	3	ENGR 0132 Engineering Dynamics	3
Physical Education	1	At Philadelphia Campus in conjunction with Temple University: Physical Education found under Kinesiology for Temple University courses	2
General Education	3	At Philadelphia Campus: BIB 200, World Views, CB, Ethics	3

THIRD YEAR: FALL			
Messiah Course	# Cr	Temple Course	# Cr
ENGR 371 Thermodynamics	3	ENGR 0271 Classical and Statistical Thermodynamics	3
ENGR 333 Mechanics of Materials	3	ENGR 0133 Mechanics of Solids	3
ENGR 373 Instrumentation and Measurement	3	ELEC ENGR W166 Instrumentation and Measurement	3
Nonwestern	3	At Philadelphia Campus in conjunction with Temple University: History, Religion, African American Studies, Asian Studies, Political Science, Latin American Studies, etc.	3
General Education	3	At Philadelphia Campus: BIB 200, World Views, CB, Ethics	3

OTHER COURSE EQUIVALENCIES IN THE MECH ENGR CONCENTRATION

Messiah Course	# Cr	Temple Course	# Cr
ENGR 372 Fluid Mechanics+lab	4	ENGR 0253 Mechanics of Fluids(3) + MECH ENGR 0006 Measurements of Fluids and Energies(1)	4
ENGR 374 Heat Transfer Analysis and Design	4	MECH ENGR 0372 Heat and Mass Transfer	3
ENGR 381 Mechanical Design	3	MECH ENGR 0231 Machine Theory and Design	3
ENGR 384 Manufacturing Process	3	MECH ENGR 0325 Intelligent Processing of Materials	3
ENGR Electives	3	Students may complete elective courses at the Messiah College-Philadelphia Campus in conjunction with Temple University with the approval of their Messiah College Academic Advisor	