

School of Engineering and Engineering Technology
ENGINEERING, B.S.
WELDING and MATERIALS JOINING CONCENTRATION
(ENGR.WEMJ/WEMJE)
2025-26
SUGGESTED COURSE SEQUENCE

First Semester - Fall				
17 Hours				
_____	BIBL	1033	3	Biblical Literature
_____	ENGL	1013	3	English Composition I
_____	ENGR	1513	3	Intro to Engineering Practice I (Fall)
_____	LETU	1101	1	Cornerstones of Life & Learning
_____	MATH	1903	3	Calculus I ⁽¹⁾
_____	CHEM	1111	1	General Chemistry I Lab
_____	CHEM	1113	3	General Chemistry I

Third Semester - Fall				
17				
_____	ENGR	2313	3	Materials Engineering
_____	MATH	2303	3	Linear Algebra
_____	MEGR	2013	3	Statics ⁽¹⁾
_____	PHYS	2021	1	University Physics II Lab (Fall only)
_____	PHYS	2023	3	University Physics II (Fall only)
_____	MJET	2021	1	Mat Joining Fundamentals Lab (Fall)
_____	MJET	2023	3	Mat Joining Fundamentals (Fall only)

Fifth Semester - Fall				
16				
_____	COMM	1113	3	Intro to Speech Communication
_____	MJEG	3213	3	Thermo Kinetics & Strctr of Mat'ls (Fall)
_____	MJEG	3201	1	Mat'ls Testing & Char Lab (Fall only)
_____	MJEG	4313	3	Nondestructive Evaluation (Fall only)
_____	MATH	2203	3	Differential Equations
_____	MEGR	2023	3	Dynamics ⁽¹⁾

Seventh Semester - Fall				
15				
_____	ENGR	4813	3	Senior Design I (Fall only)
_____	MJEG	4723	3	Heat Transfer for Welding (Fall only)
_____	MJEG	3XX3	3	Welding Engineering Elective
_____			3	Humanities & Fine Arts Elective
_____			3	Civic Engagement Elective

Second Semester - Spring				
17				
_____	COSC	1303	3	Computer Science 1
_____	ENGL	1023	3	English Composition II
_____	ENGR	1523	3	Intro to Engineering Practice II (Spring)
_____	ENGR	1311	1	Manufacturing Processes Lab
_____	MATH	2013	3	Calculus II ⁽¹⁾
_____	PHYS	2011	1	University Physics I Lab (Spring only)
_____	PHYS	2013	3	University Physics I (Spring only)

Fourth Semester - Spring				
16				
_____	THEO	2043	3	Biblical Theology for the Christian Life
_____	ENGR	2400	0	Sophomore Design Seminar (Spring)
_____	MEGR	3323	3	Mechanics of Materials (Spring only)
_____	MATH	2023	3	Calculus III
_____	MJEG	3103	3	Joining Methods 1 (Spring only) ⁽¹⁾
_____	EEGR	2051	1	Circuits & Measurements Lab ⁽¹⁾
_____	EEGR	2053	3	Electric Circuits ⁽¹⁾

Sixth Semester - Spring				
16				
_____	MJEG	3223	3	Welding Metallurgy 1 (Spring only) ⁽¹⁾
_____	MJEG	3013	3	Design Topics in Welding Eng (Spring)
_____	MATH	3403	3	Statistics
_____	BIBL		3	Biblical Engagement Elective
_____	ENGR	2704	4	Project Mgmt, Design & Entrep

Eighth Semester - Spring				
15				
_____	ENGR	4823	3	Senior Design II (Spring only)
_____	MJEG	4213	3	Welding Metallurgy 2 (Spring only)
_____			3	STEM Elective
_____	THEO		3	Theological Engagement Elective
_____			3	Civic Engagement Elective

TOTAL HOURS 129

1: Minimum grade for 'C' required.

Approved STEM Electives (Undergraduate)				
A STEM elective includes all Technical Electives (below) plus additional 3000+ Math, Science, Business and 2000+ Computer Science.				
Example approved 3000+ technical engineering electives				
_____	CVGR	3313	3	Structural Analysis
_____	CVGR	3224	3	Design of Steel Structures
_____	MEGR	4443	3	Machine Design
_____	MEGR	4423	3	Vibrations
_____	EEGR	4913	3	ST: Electrical Power Systems
_____	ENGR	4951	3	ST: Junior Design I & 2
_____	ENGR	6223	3	Advanced Engineering Mathematics
_____	ENGR	6513	3	Design/Analysis of Engr Experiments

Approved Welding Engineering Electives				
_____	MJEG	4023	3	Welding Procedure Devel & QC (Fall, Even)
_____	MJEG	4353	3	Automation in Welding & Mfg (Fall, Odd)
<i>*The following 4000 level MJE courses available for parallel U/G Credit</i>				
_____	MJEG	5023	3	Welding Procedure Devel & QC (Fall, Even)
_____	MJEG	5213	3	Welding Metallurgy II (Spring only)
_____	MJEG	5313	3	Nondestructive Evaluation (Fall only)
_____	MJEG	5353	3	Automation in Welding & Mfg (Fall, Odd)

