Addendum D: Electrical Engineering (BSEE)

Satisfaction of the following CLC courses is assumed upon entry into the Electrical Engineering program at MSOE. Any course requirement that is not met must be satisfied at MSOE or with approved transfer credit.

CLC Course Number	CLC Course Name	Equivalent MSOE Course Number
Communication & General Education		
ENG 121	English Composition 1	COM 1001
ENG 126	Scientific & Technical Communication	COM 2001
SOC 121 (suggested)	Introduction to Sociology - See appendix for more options	SOC 1001
ECO 222 (suggested)	Principles of Microeconomics See appendix for more options	BUS 2221
PHI 125 (suggested)	Intro to Ethics - See appendix for more options	HUM 0103
Mathematics & Natural Science		
MTH 145	Calculus & Analytic Geometry I	MTH 1110
MTH 146	Calculus & Analytic Geometry II	MTH 1120
MTH 246	Calculus & Analytic Geometry III	MTH 2130
MTH 227	Differential Equations	MTH 2140
CHM 121	General Chemistry I	CHM 1010
PHY 123	Physics for Science & Engineering I	PHY 1110
PHY 124	Physics for Science & Engineering II	PHY 1120
Electrical Engineering Courses		
EGR 120 **AND** EGR 260	Introduction to Engineering **AND** Introduction to Circuit Analysis	ELE 1000
EGR 260	Introduction to Circuit Analysis	ELE 2021
EET 223	Digital Logic	CPE 1500
CSC 128	Computer Science I	Free Elective
Electrical Engineering Technical Elective – Choose 1		
MTH 225 (suggested)	Introduction to Linear Algebra	EE Technical Elective (MTH 2340)
MTH 244	Discrete Mathematics	EE Technical Elective (MTH 2310)
EGR 125	Engineering Statics	EE Technical Elective (MEC 2010)

ADDITIONAL BSEE TRANSFER COURSES AVAILABLE THROUGH CLC

CLC Course Number	CLC Course Name	Equivalent MSOE Course Number
Communication & General Education		
CMM 121	Fundamentals of Speech	COM 3001
General Education Elective	See Appendix for Options	Choice CLO

Addendum D: Electrical Engineering (BSEE)

Courses remaining in the Electrical Engineering program (BSEE) at MSOE, assuming successful completion of all courses listed on the preceding page.

MSOE Course Number	MSOE Course Name	Semester Credits
Communication & General Education		
COM 3001	Professional Presentations	3
Choice CLO	Many Options	3
BSEE Program		
IDS 2020	Career Development	0
ELE 1601	Introduction to Programming for EEs	3
ELE 2022	Bridge Electric Circuits	4
ELE 2610	Embedded Systems	4
ELE 3101	Electronics I	4
ELE 3900	Career & Professional Guidance	1
ELE 3201	Electromagnetics & Transmission Lines	4
ELE 3300	Signals & Systems	3
ELE 3401	Electric Power & Machines	4
ELE 3510	Digital Systems	4
ELE 3111	Electronics II	3
ELE 3701	Control Systems	4
ELE 3320	Digital Signal Processing	3
ELE 3310	Introduction to Probability & Random Processes	3
ELE 4901	Senior Design Project I	3
ELE 4902	Senior Design Project II	3
Elective	ECBE or DSAC Technical Elective	3
Elective	ECBE or DSAC Technical Elective	3
PHY 3700	Physics of Electronic Materials & Semiconductor Devices	4
Total		**66**

APPENDIX: GENERAL EDUCATION HUMANITIES & SOCIAL SCIENCE EQUIVALENCIES

MSOE requires courses that fulfill Common Learning Outcome (CLO) categories.
The following four CLO categories can be satisfied with CLC courses:

- Exhibit Curiosity CLO
- Embrace Diversity CLO
- Demonstrate Ethical Understanding
- Choice CLO – Choose one course from the table below

Note: Each course counts towards only one CLO and the same course cannot fulfill multiple CLO categories.

CLO	CLC Courses	Equivalent MSOE Courses
Exhibit Curiosity	ANT 121 Intro to Anthropology	ANT 1001 Cultural Anthropology
	ANT 221 Cultural Anthropology	ANT 1001 Cultural Anthropology
	ART 121 Intro to Art	AHT 2001 Western Art History
	ART 240 History of Art I	HUM 0106 AHT EL
	ART 241 History of Art II	HUM 0106 AHT EL
	ECO 221 Principles of Macro	BUS 2222 Macroeconomics
	ECO 222 Principles of Micro	BUS 2221 Microeconomics
	ENG 128 Linguistics & Society	PSY 2010 Understanding Hum. Lang.
	ENG 243 Introduction to Fiction	LIT 2010 Literary Genres
	HST 121 Western Civ to 1500	HUM 0106 HIST EL
	HST 122 Western Civ 1500 to Present	HUM 0106 HIST EL
	HST 126 Non-Western World	HUM 0106 HIST EL
	HST 142 World History from 1500	HUM 0106 HIST EL
	HST 221 US History to 1876	HST 1013 US History I
	HST 222 US History 1876-Present	HST 1014 US History II
	HUM 123 Intro to Film	FNA 4010 Film & Media Studies
	HUM 222 Film & Society	FNA 4010 Film & Media Studies
	PSY 121 Intro to Psychology	PSY 1001 Foundations of Psychology
	PSY 122 Industrial/Org Psychology	PSY 2003 Organizational Psychology
	PSY 220 Lifespan Psychology	PSY 3003 Developmental Psychology
	PSY 222 Child Growth & Develop.	SSC 0106 PSY EL
	PSY 223 Abnormal Psychology	PSY 3002 Psych. Disorders
	SOC 121 Introduction to Sociology	SOC 1001 Foundations of Sociology
	SPA 121 Beginning Conver. Span I	SPN 1001 Elementary Spanish
	SPA 122 Beginning Conver. Span II	SPN 1001 Elementary Spanish
Embrace Diversity	ANT 121 Introduction to Anthro.	ANT 1001 Cultural Anthropology
	ANT 221 Cultural Anthropology	ANT 1001 Cultural Anthropology
	PHI 123 Philosophy of Religion	PHL 3209 Philosophy of Religion
	PSY 223 Abnormal Psychology	PSY 3002 Psych. Disorders
	SOC 121 Introduction to Sociology	SOC 1001 Foundations of Sociology
	SPA 121 Beginning Conver. Span I	SPN 1001 Elementary Spanish
	SPA 122 Beginning Conver. Span II	SPN 1001 Elementary Spanish
	SPA 224 Spanish Civilization II	SPN 4980 Topics in Spanish
Ethical Understanding	PHI 125 Intro to Ethics	HUM 0103 Demonstrate Ethical