Addendum C: Computer Science (BSCS)

Satisfaction of the following CLC courses is assumed upon entry into the Computer Science 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
Computer Science Courses		
CSC 128 **AND** CSC 148	Computer Science I **AND** Computer Science II	CSC 1110
CSC 248	Data Structures	CSC 2212
MTH 225	Linear Algebra	MTH 2340
MTH 244	Discrete Mathematics	MTH 2310
EGR 121 **OR** EGR 140	Engineering Design Graphics **OR** How to Make Almost Anything	Free Elective

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ADDITIONAL BSCS 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 C: Computer Science (BSCS)

Courses remaining in the Computer Science program (BSCS) 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
Mathematics & Natural Science		
MTH 2480	Probability & Statistics	3
BSCS Program		
IDS 2020	Career Development	0
BUS 2411	Building Inclusive Teams	3
CYB 2001	Introduction to Cybersecurity Principles	3
SWE 2712	Software Tools & Process	3
CSC 1120	Data Structures & Graphic Interfaces	4
CSC 2623	Exploring Data	3
CSC 3310	Algorithms & Advanced Data Structure	3
CSC 3320	Databases	3
CSC 3601	Foundations of Machine Learning	3
CSC 3621	Data Science	3
CSC 3210	Operating Systems	3
CSC 4603	Applied Deep Learning	3
SWE 2512	Web Applications & Networking	4
CSC 4611	Introduction to Deep Learning	3
CSC 4801	Data Science Practicum	3
CSC 4901	Computer Science Capstone I	3
CSC 4902	Computer Science Capstone II	3
Elective	Upper-Level Elective	3
Elective	Upper-Level Elective	3
Total		**65**

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