

Michigan Technological University
Bachelor of Science Degree Audit
Major Program: Computer Engineering
Program Code ECP, Academic Year 2019-20
Total credits required for the degree: 128

Core Requirements: 80 to 86 credits

Course	Credits
CS 1121 or CS 1131	3/5
CS 1122 (not required if CS 1131 is taken)	3
CS 1142	3
CS 2311	3
CS 2321	3
CS 3331 or EE 3160	3
CS 3411	3
CS 3421	3
CS 4321	3
EE 1111	1
EE 1110	1
EE 2111	3
EE 2112	4
EE 2174	4
EE 3131	4
EE 3173	4
EE 3901	2
EE 4173	3
EE 4272	3
ENG 1101 or ENG 1001 and ENG 1100	3/4
MA 1160 and MA 1161	4/5
MA 2160	4
MA 2321	2
MA 3521	2
MA 3710	3
PH 1100	1
PH 1200	1
PH 2100	3
PH 2200	3

Directed Math/Science Elective: 6 credits

STEM 2nd discipline Science Course: 3 credits minimum

Course	Credits
BL 1400 or CH 1150 and CH 1151 or GE 2000	3/4

Choose remaining Directed Math/Science Elective:

MA2600, 2910, MA3XXX or higher (excluding MA3720, 3750, 3810, 3811, 3990, 4810, 4820, 4905, 4945); BL1010 or higher (excluding BL1580, 1590, 1710, 1800, 3970, 3990); CH1500 or higher; PH1090, 1091, 1600, 1610, 2300 or higher; EE3180

Course	Credits
	3

Technical Electives: 6 credits

(7 credits required if CS 1131 is taken)

Course	Credits
	3
	3

Free Electives: 0 credits

Any coursework is allowable, excluding co-curricular and coursework below the 1000-level.

Course	Credits

Co-curricular Activities: 3 credits

Required for graduation, but not included in the GPA calculation or in the overall credits required for the degree. Only courses on the co-curricular course list are eligible. Half credit (0.5) courses may be repeated to a maximum of one time for co-curricular credit. Find eligible courses on the [General Education](#) page.

Course	Credits

Senior Design Path: 10 credits

Senior Design: 4 credits

(EE 4901 and EE 4910) **OR** (MEEM 4901 and MEEM 4911)

Course	Credits
	2
	2

Additional Technical Electives: 6 credits required

Select from ENG 1102 (if taken w/FY program, up to 4 credits maximum from UN 3002, UN 3003 and/or from course list below)

Course	Credits

OR Enterprise Design Path: 10 credits

Engineering Design: 6 credits

ENT3950, ENT3960, ENT4950 **and** ENT4960 **OR**ENT3960, ENT4950, ENT4960 **and** ENT module from following:
ENT2961, ENT2962, ENT3959, ENT3963, ENT3966, ENT3967,
ENT2971, ENT4951

Course	Credits
	1
	1
	2
	2

Additional Technical Electives: 4 credits required

Select from ENG 1102 (if taken w/FY program, up to 4 credits maximum from UN 3002, UN 3003 and/or from course list below)

Course	Credits

Technical Electives Course List:

CS3141, 3311, 3331, 3425, 3712

CS4001-4999 (excluding CS4090, 4099, 4431, 4791, 4792)

CS5000-5899 (excluding CS5090, 5091)

EE3090-3999 and EE4001-4799 (excluding EE3171, 3901)

EE5000-7999 (excluding EE5290, 5975, 5990, 5991, 5992, 4994, 6975)

MA3202, 3203, MEEM4707

General Education Core and HASS

Courses used to complete Core and HASS requirements may not be used to complete other degree requirements. Students must complete 12 credits of Core coursework and 12 credits of Humanities, Fine Arts, and Social Science (HASS) coursework. Repeatable courses may not be repeated for general education credit. Core and HASS courses can be found on the [General Education](#) page.

Core: 12 credits

Course	Credits
UN 1015	3
UN 1025 or an upper level modern language	3
Critical and Creative Thinking	3
Social Responsibility and Ethical Reasoning	3

HASS: 12 credits

Six of the 12 HASS credits must be at the 3000 or 4000 level (an upper division language course in place of UN1025 does not meet this requirement). No more than three credits may come from the HASS Restricted course list.

Course	Credits
Communication/ Composition	Minimum 3
Humanities and Fine Arts	Minimum 3
Social and Behavioral Sciences	Minimum 3
Course from any list above or from the Restricted HASS course list	0 to 3