

Michigan Technological University

Bachelor of Science Degree Audit

Major Program: Electrical Engineering, Concentration: Biomedical Applications

Program Code EEEB, Academic Year 2021-22

Total credits required for the degree: 128

Core Requirements: 45 credits*

Course	Credits
CS 1111	3
EE 2111	3
EE 2112	4
EE 2174	4
EE 3131	4
EE 3140	3
EE 3160	3
EE 3171 or BE4770*	3/4
EE 3180	3
EE 3261	3
EE 3901	2
EE 4250	3
ENG 1101 or (ENG 1001 and ENG 1100)	3/4
ENG 1102	3

Math and Science: 28 credits

Course	Credits
CH 1150	3
CH 1151	1
MA 1121 or MA 1160 or MA 1161	4/5
MA 2160	4
MA 2321	2
MA 3160	4
MA 3521	2
PH 1100	1
PH 1200	1
PH 2100	3
PH 2200	3

EE Technical Electives: 6 credits*

Any EE course except CS1000, EE3010, EE3173, EE4000, EE4805, EE4901, EE4910 and those listed in major requirements. No more than 3 credits of EE2000-EE2999. Department approval required for EEnXXe.

Course	Credits

* If BE4770 is taken, then student must take 7 credits of EE Technical Electives

Senior Design Path: 4 credits

Senior Design: 4 credits

(May use MEEM 4901 and MEEM 4911)

Course	Credits
EE 4901	2
EE 4910	2

or Enterprise Design Path: 6 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, ENT3971, ENT3982, ENT3983, ENT4951

Course	Credits
	1
	1
	2
	2

Concentration Requirements: 19 credits

Course	Credits
BL 2010	3
BL 2020	3
BE 2400	3
BE 3700	3
BE 3701	1
(BE 2800 or MSE 2100) or BE 3300	3

BEA Elective: choose one course:

(BE2800 or MSE2100) or BE3300, BE3350, BE3800, BE4250, BE4510, BE4670, BE4700, BE4755

Course	Credits

Free Electives: 2 credits

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

Course	Credits

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

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