

# ELECTRONICS ENGINEERING TECHNOLOGY DEGREE CHARTS IST Minor

(Prerequisites Included)

**Select your Mathematics entry course:** 

- 1. 4-Year Plan
- 2. 5-Year Plan

#### Bachelor of ELECTRONICS ENGINEERING TECHNOLOGY (EET) – Fall 2022

**4-Year** Recommended Course Sequence with IST Minor

| Fall                | Spring   | Fall               | Spring               | Fall                         | Spring                | Fall                     | Spring                         |  |
|---------------------|--|--------------------|----------------------|------------------------------|-----------------------|--------------------------|--------------------------------|--|
| Semester 1          | Semester 2   | Semester 3         | Semester 4           | Semester 5                   | Semester 6            | Semester 7               | Semester 8                     |  |
| EET 205 [3]         | EET 207 [3]  | EET 201 [3]        | EET 202 [3]          | EET 315 [3]                  | EET 320 [3]           | EET 460 [1]              | EET 480 [3]                    |  |
| DC Circuits         | AC Circuits  | Fundamentals       | Fundamentals of      | Microprocessors & Digital    | Embed Microprocessor  | Senior Design A          | Senior Design B                |  |
|                     | (EET 205)  | of Electronics     | Digital Systems      | Systems Design               | Systems               | (Senior Standing)        | (MET 460)                      |  |
|                     |  | (EET 205)          | (EET 201)            | (EET 202)                    | (EET 315)             |                          |                                |  |
| ESC 100 [1]         | ESC 120 [2]  | <u>GET 240</u> [3] | <u>GET 315</u> [3]   | EET 316 [1]                  | EET 330 [3]           | <u>EET 410</u> [3]       | <u>GET 444</u> [3]             |  |
| New Student         | Intro to   | Programmable       | Advanced Programming | Microprocessors & Digital    | Adv. Circuit Analysis | Power Electronic Systems | HMI Applications               |  |
| Orientation         | Engineering Design   | Logic Controllers  | Methods              | Systems Design Lab           | (EET 207 and MTT 300) | (MTT 301 & EET 330)      | for PLC's                      |  |
|                     |  | (EET 205)          |                      | (EET 202)                    |                       |                          | (GET 240)                      |  |
| <u>GET 255</u> [3]  | PHY 221 [5]  | **ESC 130 [1]      | CHM 251 [3]          | <u>GET 310</u> [3]           | EET 430 [3]           | <u>EET 411 [1]</u>       | <u>EET 440</u> [3]             |  |
| Intro Robotics &    | College Physics I  | Engineering        | College Chemistry 1  | Computer Systems Tech.       | App. of FPGA's & VHDL | Power Elec. Systems Lab  | Feedback Control Systems       |  |
| Automated Systems   | (MTH 165 or MTH 167)   | Co-op Orientation  | (MTH 149)            | (*EET 315)                   | (EET 315 and EET 316) | (MTT 301 & EET 330)      | (MTT 301 and EET 330)          |  |
| MTH 165 [3]         | MTH 149 [4]  | GET 285 [3]        | CHM 256 [1]          | PHL 215 [3] A&H              | EET 494 [3]           | EET 415 [3]              | EET 441 [1]                    |  |
| Intensive Precalc I | Math for Business  | Science of         | College              | Engineering Ethics           | Advanced Topics       | Electronic Circuits/     | Feedback Control               |  |
| MTH 167 [3]         | Majors II  | Alternative Energy | Chemistry 1 Lab      | (ENG 102 or ESC 102)         | in Electronics        | Signals/Systems          | Systems Lab                    |  |
| Precalculus I       | (MTH 148)  |                    | (MTH 149)            | (WAC)                        |                       | (EET 201 and EET 330)    | (MTT 301 and EET 330)<br>(WAC) |  |
| ENG 100 [3]         | ESC 102 [3]  | General Ed.        | IST 203 [3]          | MTT 300 [3]                  | MTT 301 [3]           | EET 416 [1]              | EET 494 [3]                    |  |
| Intensive Writing   | Technical Writing  | Elective [3]       | Software Tools       | Applied Math                 | Advanced              | Electronic Circuits/     | Advanced Topics                |  |
| or                  | (Preferred)  | Licetive [5]       | 00.000               | (MTH 149)                    | Applied Math          | Signals/Systems Lab      | in Electronics                 |  |
| ENG 101 [3]         | (ENG 100 or ENG 101)   |                    |                      | (                            | (MTT 300)             | (EET 201 and EET 330)    | III Electronics                |  |
| College Writing 1   |  |                    |                      |                              |                       |                          |                                |  |
| General Ed.         |  | Communications     | General Ed.          | <u>IST 211</u> [4]           | IST 321 [3]           | IST 331 [3]              | IST Elective [3]               |  |
| Elective [3]        |  | Elective [3] (WAC) | Elective [3]         | Fundamentals of Systems Dev. | Systems Analysis      | Modern Database Design   |                                |  |
|                     |  |                    |                      | (IST 203)                    | Methods<br>(IST 221)  | (IST 221)                |                                |  |
|                     |  |                    |                      |                              | (131 221)             | General Ed.              |                                |  |
|                     |  |                    |                      |                              |                       |                          |                                |  |
|                     |  |                    |                      |                              |                       | Elective [3]             |                                |  |
|                     |  |                    |                      |                              |                       | General Ed.              |                                |  |
|                     |  |                    |                      |                              |                       | Elective [3]             |                                |  |
| 16 Total            | 16 Total   | 16 Total           | 16 Total             | 17 Total                     | 18 Total              | 18 Total                 | 16 Total                       |  |
| Credit Hours        | Credit Hours   | Credit Hours       | Credit Hours         | Credit Hours                 | Credit Hours          | Credit Hours             | Credit Hours                   |  |
|                     | Total Credits for EET Degree: 131 or 132 including ESC 130 Engineering Co-op Orientation                         |                    |                      |                              |                       |                          |                                |  |
|                     | (Prerequisites) • (*Pre/co-requisite) • [# of Course Credits] • EET XXX = Only Offered That Fall/Spring Semester |                    |                      |                              |                       |                          |                                |  |

Required EET Courses \*\*Highly recommended, yet optional.
Required Science Courses
Required English Courses (ESC 102 is preferred. However, can be substituted with ENG 102.)
Required Writing Across the Curriculum (WAC)

IST Minor Requirements

Required EET Electives
Required Science Courses
Required Math Courses
General Ed. Electives (2 A&Hs, 2 SSs, 1 ALAAME, & 2 DIVs)
EASILY EARN AN OSM MINOR AS AN EET MAJOR! CLICK HERE TO LEARN HOW

#### **Bachelor of ELECTRONICS ENGINEERING TECHNOLOGY (EET) - Fall 2022**

5-Year Recommended Course Sequence with IST Minor

| E.U  | C                   | E - 11              | Carian             | F - II             | C                      | E.U                  | Carina              | E.U                   | C                   |
|--|---------------------|---------------------|--------------------|--------------------|------------------------|----------------------|---------------------|-----------------------|---------------------|
| Fall   | Spring              | Fall                | Spring             | Fall               | Spring                 | Fall                 | Spring              | Fall                  | Spring              |
| Semester 1   | Semester 2          | Semester 3          | Semester 4         | Semester 5         | Semester 6             | Semester 7           | Semester 8          | Semester 9            | Semester 10         |
| EET 205 [3]  | ESC 120 [2]         | EET 201 [3]         | EET 202 [3]        | EET 315 [3]        | <u>GET 315</u> [3]     | <u>GET 310</u> [3]   | <u>EET 440</u> [3]  | EET 460 [1]           | EET 480 [3]         |
| DC Circuits  | Intro to            | Fundamentals of     | Fundamentals of    | Microprocessors &  | Advanced               | Computer Systems     | Feedback Control    | Senior Design A       | Senior Design B     |
|  | Engineering         | Electronics         | Digital Systems    | Digital Systems    | Programming            | Tech.                | Systems             | (Senior               | (MET 460)           |
|  | Design              | (EET 205)           | (EET 201)          | Design             | Methods                | (*EET 315)           | (MTT 301 and        | Standing)             |                     |
|  |                     |                     |                    | (EET 202)          |                        |                      | EET 330)            |                       |                     |
| GET 255 [3]  | EET 207 [3]         | <u>GET 240</u> [3]  | CHM 251 [3]        | EET 316 [1]        | EET 320 [3]            | <u>EET 415</u> [3]   | EET 441 [1]         | <u>EET 410</u> [3]    | <u>GET 444</u> [3]  |
| Intro Robotics   | AC Circuits         | Programmable        | College            | Microprocessors &  | Embed                  | Electronic Circuits/ | Feedback Control    | Power Electronic      | HMI Applications    |
| & Automated  | (EET 205)           | Logic Controllers   | Chemistry 1        | Digital Systems    | Microprocessor         | Signals/Systems      | Systems Lab         | Systems               | for PLC's           |
| System   |                     | (EET 205)           | (MTH 149)          | Design Lab         | Systems                | (EET 201             | (MTT 301 and        | (MTT 301 &            | (GET 240)           |
|  |                     |                     |                    | (EET 202)          | (EET 315)              | and EET 330)         | EET 330)            | EET 330)              |                     |
| ENG 100 [3]  | MTH 149 [4]         | **ESC 130 [1]       | CHM 256 [1]        | GET 285 [3]        | EET 330 [3]            | EET 416 [1]          | IST 321 [3]         | EET 441 [1]           | EET 430 [3]         |
| Intensive Writing  | Math for            | Engineering         | College            | Science of         | Advanced               | Electronic Circuits/ | Systems Analysis    | Feedback Control      | App. Of             |
| or   | Business            | Co-op Orientation   | Chemistry 1 Lab    | Alternative Energy | Circuit Analysis       | Signals/Systems Lab  | Methods             | Systems Lab           | FPGA's & VHDL       |
| ENG 101 [3]  | Majors II           |                     | (MTH 149)          |                    | (EET 207               | (EET 201             | (IST 221)           | (MTT 301              | (EET 315            |
| College Writing 1  | (MTH 148)           |                     |                    |                    | and MTT 300)           | and EET 330)         |                     | and EET 330)<br>(WAC) | and EET 316)        |
| MTH 165 [3]  | ESC 102 [3]         | PHY 221 [5]         | IST 203 [3]        | MTT 300 [3]        | MTT 301 [3]            | IST Elective [3]     | IST Elective [3]    | IST 331 [3]           | EET 494 [3]         |
| Intensive Precalc I  | Technical Writing   | College Physics I   | Software Tools     | Applied Math       | Advanced               | isi Liective [s]     | isi Liective [s]    | Modern                | Advanced Topics     |
| OR   | (Preferred)         | (MTH 165            | Software roofs     | (MTH 149)          |                        |                      |                     | Database Design       | in Electronics      |
| MTH 167 [3]  | (ENG 100            | or MTH 167)         |                    | (IVITH 149)        | Applied Math (MTT 300) |                      |                     | (IST 221)             | III Electronics     |
| Precalculus I  | or ENG 101)         | 01 141111 107)      |                    |                    | (10111 300)            |                      |                     | <b>V</b> = <b>V</b>   |                     |
| ESC 100 [1]  | ,                   |                     | Communications     | IST 211 [4]        | General Ed.            | General Ed.          | General Ed.         | General Ed.           | EET 494 [3]         |
| New Student  |                     |                     |                    | Fundamentals of    | Elective [3]           | Elective [3]         | Elective [3]        | Elective [3]          | Advanced Topics     |
| Orientation  |                     |                     | Elective [3] (WAC) | Systems Dev.       |                        |                      |                     |                       | in Electronics      |
|  |                     |                     |                    | (IST 203)          |                        |                      |                     |                       | 2.0.0               |
|  |                     |                     |                    |                    |                        |                      |                     | General Ed.           |                     |
|  |                     |                     |                    |                    |                        |                      |                     | Elective [3]          |                     |
| 13 Total   | 12 Total            | 12 Total            | 13 Total           | 14 Total           | 15 Total               | 13 Total             | 12 Total            | 14 Total              | 15 Total            |
| Credit Hours   | <b>Credit Hours</b> | <b>Credit Hours</b> | Credit Hours       | Credit Hours       | <b>Credit Hours</b>    | <b>Credit Hours</b>  | <b>Credit Hours</b> | <b>Credit Hours</b>   | <b>Credit Hours</b> |
|  |                     | Total Credits       | for EET Degree:    | 131 or 132 inclu   | ding ESC 130 En        | gineering Co-op (    | Orientation         |                       |                     |
|  | (Drozos             |                     |                    |                    |                        |                      |                     | Somostor              |                     |
| (Prerequisites) • (*Pre/co-requisite) • [# of Course Credits] • EET XXX = Only Offered That Fall/Spring Semester |                     |                     |                    |                    |                        |                      |                     |                       |                     |

Required EET Courses \*\*Highly recommended, yet optional. **Required EET Electives Required Science Courses Required Math Courses** Required English Courses (ESC 102 is preferred. However, can be substituted with ENG 102.) General Ed. Electives (2 A&Hs, 2 SSs, 1 ALAAME, & 2 DIVs) Required Writing Across the Curriculum (WAC) **EASILY EARN AN OSM MINOR AS AN EET MAJOR! CLICK HERE TO LEARN HOW IST Minor Requirements** 

### To eliminate one (1) of your General Education Requirements, consider taking a course that qualifies as two (2) General Ed. Electives

**Updated Fall 2022** 

| Recommended Courses t                      | hat Qualify as To       | wo (2) General Ed.        | Electives  |
|--|-------------------------|---------------------------|--|
| Course                                     | Social<br>Sciences (SS) | Arts &<br>Humanities (AH) | Non-Western Social<br>Sciences<br>(ALAAME & NW-SS) |
| ANT 275 – Ancient Mysteries                | X                       |                           | X  |
| COM 233 – Bollywood & Beyond               | X                       |                           | X  |
| HIS 104 – Modern World History             | х                       |                           | X  |
| SOC 210 – Dev. Societies in Changing World | х                       |                           | X  |
| UST 206 – Megacities of Asia               | Х                       |                           | X  |
| ANT 103 – Rise/Fall of Civilizations       |                         | х                         | X  |
| ART 281 – Asian Art                        |                         | Х                         | X  |
| MUS 263 – Black Music of Two Worlds        |                         | x                         | X  |
| REL 101 – Understanding Religion           |                         | х                         | X  |

## Popular Introductory General Ed. Courses for Engineering Students

MUS 161 – Roots of Rock & Soul (AH)

**UST 201 – Building Cleveland (NEW) (AH)** 

**REL 101 – Understanding Religion (AH & ALAAME)** 

**UST 200 – Intro to Urban Studies (SS)** 

ANT 275 – Ancient Mysteries (SS & ALAAME)

**SWK 150 – The Black Experience** 

(African American DIV)

ANT 100 – Human Diversity (US DIV)

SOC 201 – Race/Class/Gender (US DIV)