

Catalog Year 2025-2026

AAS, Robotics and Communications Systems Engineering Technology

| (For i | internal use only) | | | | |
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☐ UCC proposal

A Major Academic Plan (MAP) is one way to complete a degree in a set number of semesters. The *example* below is only one strategy. Actual plans for individual students will vary based on advisor recommendations and academic needs. Official Program Requirements including Major, General Education, Electives, and university requirements (see pg.2) are based on Catalog Year.

| Course Subject and Title | Cr. | Min. Grade | *GE, UU or UM | **Sem. Offered | Prerequisite | Co-Requisite |
|---|--------|---------------|------------------|--|------------------------------------|------------------------|
| Semester One | | | | | | |
| GE Objective 1: ENGL 1101 Writing and Rhetoric I | | D- | GE | F, S, Su | Appropriate placement score | |
| RCET 1153A: Basic Electricity and DC Circuit Theory | | C- | | F, S | Minimum score of ALEKS 30 | RCET 1153B |
| | 4 | C- | | г, э | or equivalent | |
| RCET 1153B: Basic Electricity and AC Circuit Theory | 4 | C- | | F, S | RCET 1153A | RCET 1153A, 1155B |
| RCET 1155A: Basic Electricity and DC Circuit Lab | 2 | C- | | F, S | | RCET 1155B |
| RCET 1155B: Basic Electricity and AC Circuit Lab | 2 | C- | | F, S | RCET 1155A | RCET 1155A, 1153B |
| Total | 15 | | | | | |
| Semester Two | | | | | | |
| GE Objective 5: PHYS 1101/L Elements of Physics and Lab | | | | F, S | | |
| OR PHYS 1100 Essentials of Physics OR | | D- | GE | F, S | Appropriate placement score | |
| PHYS 1111/1113 General Physics I and Lab | | | | F | | |
| RCET 1154A: Analog Control Devices Theory | | _ | | ۲ (۲ | RCET 1153A, 1153B, 1155A, | DCET 11E6A |
| · | 4 | C- | | F, S, D | 1153B | RCET 1156A |
| RCET 1154B: Digital Control Devices Theory | | C- | | F, S, D | RCET 1153B | RCET 1156B |
| RCET 1156A: Analog Control Devices Lab | | - | | | RCET 1153A, 1153B, 1155A, | |
| - | 2 | C- | | F, S, D | 1155B | RCET 1154A |
| RCET 1156B: Digital Control Devices Lab | 2 | C- | | F, S, D | RCET 1155B | RCET 1154B |
| Total | 16 | | | | | |
| Semester Three | | | , | | | |
| GE Objective 3: RCET 1372 Calculus for Electronics | | | 0.5 | | MATH 1144 or 1147 or RCET | |
| • | 4 | C- | GE | F, S | 1154A | |
| RCET 2251: Systems Analog and Digital Theory | _ | | | | PHYS 1101/L, 1100, | 2057 2050 |
| | 6 | C- | | F, S | 1111/1113 | RCET 2253 |
| RCET 2253: Systems Analog and Digital Lab | | C- | | F, S | RCET 1156B | RCET 2251 |
| RCET 2271: Introduction to Lab Simulation Software | 2 | C- | | F, S | | |
| Total | 17 | _ | | .,. | | |
| Semester Four | | | l | 1 | | |
| RCET 2265: Computer Fundamentals and Introduction to | 4 | | | | | 1 |
| Programming | | C- | | F, S | | |
| RCET 2267: Radio Frequency Transmission Theory | | C- | | F, S | RCET 1372, 2251, 2253 | RCET 2268 |
| RCET 2268: Radio Frequency Transmission Lab | | C- | | F, S | RCET 1372, 2251, 2253 | RCET 2267 |
| Total | | | | .,- | ,, | |
| Semester Five | 15 | | l | <u> </u> | | |
| GE Objective 2: COMM 1101 Fundamentals of Oral Comm | 3 | D- | GE | F, S | T . | |
| RCET 3371: Advanced Programming Techniques and GUI | | | J. | | | |
| Development | 4 | C- | | D | RCET 2265, 2271 | |
| RCET 3373: Advanced Computer Architecture and | | <u> </u> | | | | |
| Embedded Systems Theory | 5 | C- | | D | RCET 1154B, 2251 | RCET 3375 |
| RCET 3375: Advanced Computer Architecture and | | 1 | | İ | | |
| Embedded Systems Lab | 5 | C- | | D | RCET 1156B, 2253 | RCET 3373 |
| Total | 17 | | | | | |
| Semester Six | | | | | | |
| GE Objective 6: TGE 1150 Applied Social Sciences in the | | | | | | |
| | 3 | D- | GE | D | | |
| Workplace (recommended) | | C- | | | RCET 1372, PHYS 1101 | 1 |
| RCET 3372: Advanced Applications of Calculus for Robotics | | C- | | ļ | NCL1 13/2, FIII3 1101 | <u> </u> |
| | Л | _ | | P | DCET 2251 2267 | DCET 2276 |
| RCET 3372: Advanced Applications of Calculus for Robotics RCET 3374: Advanced Systems Analysis Theory RCET 3376: Advanced Systems Analysis Theory | 4 5 | C- | | D D | RCET 2251, 2267 RCET 2253, 2268 | RCET 3376 RCET 3374 |

^{**}See Course Schedule section of Course Policies page in the e-catalog (or input F, S, Su, etc.)

| AAS, Robotics and Communications Systems Engineerin | 1 | Page 2 | | | |
|---|-------------------------|--|---|---------------|--|
| 2025-2026 Major Requirements | CR | GENERAL EDUCATION OF | | 15 cr. | |
| · · · · · · · · · · · · · · · · · · · | | Satisfy Objectives 1,2,3,4 | | min | |
| MAJOR REQUIREMENTS | 79 | 1. Written English | ENGL 1101 | 3 | |
| RCET 1153A: Basic Electricity and DC Circuit Theory | | 2 Conduct Fundials | CONANA 4404 | 2 | |
| RCET 1153B: Basic Electricity and AC Circuit Theory | | 2. Spoken English 3. Mathematics | COMM 1101 | 3 | |
| RCET 1154A: Analog Control Devices Theory | | | RCET 1372 | 4 | |
| RCET 1154B: Digital Control Devices Theory | 4 | 4. Humanities, Fine Arts, For | eign Lang. | | |
| RCET 1155A: Basic Electricity and DC Circuit Lab | 2 | | | | |
| RCET 1155B: Basic Electricity and AC Circuit Lab | 2 | | | | |
| RCET 1156A: Analog Controls Devices Lab | 2 | 5. Natural Sciences | | | |
| RCET 1156B: Digital Control Devices Lab | 2 | PHYS 1101/L or 1100 or 111 | 1/1113 | 4 | |
| RCET 2251: Systems Analog and Digital Theory | 6 | | | | |
| RCET 2253: Systems Analog and Digital Lab | 5 | | | | |
| RCET 2265: Computer Fundamentals and Introduction to | | 6. Behavioral and Social Scie | nce | | |
| Programming | 4 | TGE 1150 | | | |
| RCET 2267: Radio Frequency Transmission Theory | 6 | | | | |
| RCET 2268: Radio Frequency Transmission Lab | 5 | One Course from EITHER Ob | jective 7 OR 8 | | |
| RCET 2271: Introduction to Lab Simulation Software | 2 | 7. Critical Thinking | | | |
| RCET 3371: Advanced Programming Techniques and GUI | 4 | 8. Information Literacy | | | |
| Development Color of | | 9. Cultural Diversity | | | |
| RCET 3372: Advanced Applications of Calculus for Robotics | 4 | Comment Education Florities | | | |
| RCET 3373: Advanced Computer Architecture and Embedded | | General Education Elective t | o reach 36 cr. min. | | |
| Systems Theory RCET 3374: Advanced Systems Analysis Theory | 4 | | Total GE | 17 | |
| , | 4 | Undergraduate Catalog and | GE Objectives by <u>Catalog Year</u> | 17 | |
| RCET 3375: Advanced Computer Architecture and Embedded Systems Lab | | http://coursecat.isu.edu/underg | | | |
| RCET 3376: Advanced Systems Analysis Theory | 5 | | | | |
| TREET 3370.7 tavarised 343tem37 that 435 Theory | | 1 | | | |
| COMM 1101: Fundamentals of Oral Communication | l . | - | | | |
| (counted in GE | Obj. 2) | | | | |
| RCET 1372: Calculus for Electronics (counted in GE | Obj. 3) | MAP Credit Summary | | CR | |
| PHYS 1101: Elements of Physics and Lab OR | | Major | | 79 | |
| PHYS 1100: Essentials of Physics OR | | General Education | | 17 | |
| PHYS 1111/1113: General Physics I and Lab (counted in GE | Obj. 5) | Upper Division Free Elect | ves to reach 36 credits | 0 | |
| | | Free Electives to reach 12 | | 0 | |
| | | | TOTAL | 96 | |
| | | | 101712 | 30 | |
| | | 1 | | | |
| | | 1 | | | |
| | | Graduation Requirement M | inimum Credit Checklist | Confirmed | |
| | | Minimum 36 cr. General Education Objectives (15 cr. AAS) | | Х | |
| | | Minimum 15 cr. Upper Division in Major (0 cr. Associate) | | X | |
| | | Minimum 36 cr. Upper Division Overall (0 cr. Associate) | | X | |
| | | | Minimum of 120 cr. Total (60 cr. Associate) | | |
| | | ivinimum of 120 Cr. Total (0 | o di . Associatej | Х | |
| Advising Notes | | MAD Completion Ctut | for internal | | |
| Advising Notes | MAP Completion Status (| | | | |
| | | | Date | | |
| | | | | | |
| | | | | | |
| | | CAA or COT: | GR 07/03/2025 | | |
| | | CAA or COT: | GR 07/03/2025 | | |
| | | CAA or COT: Complete College Americ | | | |
| | | Complete College Americ | | se identified | |
| | | Complete College Americ | can Momentum Year in first year-Specific GE MATH cours | se identified | |
| | | Complete College Americ Math and English course | can Momentum Year in first year-Specific GE MATH cours ea in first year | se identified | |