



Associate in Science (AS) Network Systems Engineering Technology (Infrastructure Specialization)

This Program Map is Part of the **Science, Technology, Engineering, and Mathematics Pathway**

Note: This Program Map is intended to serve as a guide; students should always meet with their Student Success Advisor to develop a personalized Education Plan.

Program Map for Students Attending Full-Time *****THIS MAP IS INTENDED FOR STUDENTS WHO ARE NEW TO THE INFORMATION TECHNOLOGY INDUSTRY.*****

| Term | Course ID | Course Title | Credits |
|-------------------------------------|--------------------------|--|-------------|
| Term 1 12 Credits | CET 1600C | Network Fundamentals | 3 Credits |
| | CTS 1131C | Computing Infrastructure | 3 Credits |
| | ENC 1101 | College Composition I | 3 Credits |
| | CTS 1132C | Operating Systems and Security | 3 Credits |
| Term 2 12 Credits | CET 1610C | Routing and Switching Essentials | 3 Credits |
| | CTS 2320C | Windows Server 2019 Administration | 3 Credits |
| | CTS 2109C | Virtualization Concepts and Implementation | 3 Credits |
| | Mathematics | Mathematics General Education Course (See Notes 2 and 3 Below) | 3 Credits |
| Term 3 9 Credits | CET 2615C | Scaling Networks | 3 Credits |
| | CTS 2376C | Firewall Services and Cybersecurity Essentials | 3 Credits |
| | CTS 1191C | Microsoft Azure Fundamentals | 3 Credits |
| Term 4 12 Credits | CTS 2192C | Microsoft Azure Administrator | 3 Credits |
| | CTS 1160C | Modern Desktop Administrator | 3 Credits |
| | CIS 2772C | CCNA Cybersecurity Operations | 3 Credits |
| | Humanities | Humanities General Education Course (See Note 4 Below) | 3 Credits |
| Term 5 9 Credits | CTS 2321C | Linux+ | 3 Credits |
| | Elective | Approved Elective (See Note 5 Below) | 3 Credits |
| | AMH 1020, or POS 2041 | History of the United States: 1877 to Present, or American National Government (See Note 6 Below) | 3 Credits |
| Term 6 6-8 Credits | CET 2940 | Network Engineering Technology Practicum | 1 Credit |
| | Wellness | Wellness General Education Course (See Note 7 Below) | 2-3 Credits |
| | Natural Science | Natural Science General Education Course (See Notes 7 and 8 Below) | 3-4 Credits |

Total Required Program Credit Hours: 60

A Few Notes

1. Students must meet all graduation requirements. To learn more about graduation requirements, [please refer to the College Catalog](#).
2. Students must earn an appropriate score on a placement examination or complete MAT 1033 in order to enroll in MAC 1105, or complete MAT 1100 to enroll in MGF 1106 or MGF 1107. MAT 1033 or MAT 1100 are not included in the total number of hours in this program of study.
3. Students must take one of the approved Mathematics General Education Courses in this program: MAC 1105, MAC 2311, MGF 1106, MGF 1107, or STA 2023.
4. Students must take one of the approved Humanities General Education Courses in this program: ARH 2000, HUM 2020, LIT 1000, MUL 1010, PHI 2010, or THE 1000.



5. Students must earn 12 credits hours of electives from the following list: CET 2688C, CGS 2135C, CIS 2352C, CTS 2126C, CTS 2312C, and CTS 2830C.
6. Pursuant to Rule 6A-10.02413 of the Florida Administrative Code, all degree-seeking students must demonstrate competency in civic literacy by both passing the Florida Civic Literacy Exam and by completion of either AMH 1020 (History of the United States: 1877 to the Present) or POS 2041 (American National Government). Students may also use AP or CLEP credit for one of the two courses options.
7. Students interested in earning a bachelor's degree are encouraged to earn 18 credits in General Education by completing either a 3-credit-hour science and a 3-credit hour wellness course or a 4-credit hour science and a 2-credit hour wellness course.
8. Students must take one of the approved Natural Science General Education Courses in this program: AST 1002C, BSC 1005C, BSC 1010, BSC 2085C, CHM 1045C, EVR 1001C, PHY 2020C, PHY 2048C, or PHY 2053.

Program: AS-25275 – **2022-23 Catalog Year**



Program Map for Students Attending Full-Time

*****THIS MAP IS INTENDED FOR STUDENTS WHO HAVE PREVIOUS BACKGROUND
IN THE INFORMATION TECHNOLOGY INDUSTRY.*****

| Term | Course ID | Course Title | Credits |
|-------------------------------------|--------------------------|--|-------------|
| Term 1 12 Credits | CET 1600C | Network Fundamentals | 3 Credits |
| | CTS 1131C | Computing Infrastructure | 3 Credits |
| | ENC 1101 | College Composition I | 3 Credits |
| | Mathematics | Mathematics General Education Course (See Notes 2 and 3 Below) | 3 Credits |
| Term 2 12 Credits | CET 1610C | Routing and Switching Essentials | 3 Credits |
| | CTS 2320C | Windows Server 2019 Administration | 3 Credits |
| | CTS 2109C | Virtualization Concepts and Implementation | 3 Credits |
| | Humanities | Humanities General Education Course (See Note 4 Below) | 3 Credits |
| Term 3 9 Credits | CET 2615C | Scaling Networks | 3 Credits |
| | CTS 2376C | Firewall Services and Cybersecurity Essentials | 3 Credits |
| | CTS 1191C | Microsoft Azure Fundamentals | 3 Credits |
| Term 4 12 Credits | CTS 2192C | Microsoft Azure Administrator | 3 Credits |
| | CTS 2772C | CCNA Cybersecurity Operations | 3 Credits |
| | Elective | Approved Elective (See Note 5 Below) | 3 Credits |
| | AMH 1020, or POS 2041 | History of the United States: 1877 to Present, or American National Government (See Note 6 Below) | 3 Credits |
| Term 5 9 Credits | CTS 2321C | Linux+ | 3 Credits |
| | Elective | Approved Elective (See Note 5 Below) | 3 Credits |
| | Elective | Approved Elective (See Note 5 Below) | 3 Credits |
| Term 6 6-8 Credits | CET 2940 | Network Engineering Technology Practicum | 1 Credit |
| | Wellness | Wellness General Education Course (See Note 7 Below) | 2-3 Credits |
| | Natural Science | Natural Science General Education Course (See Notes 7 and 8 Below) | 3-4 Credits |

Total Required Program Credit Hours: 60

A Few Notes

- Students must meet all graduation requirements. To learn more about graduation requirements, [please refer to the College Catalog](#).
- Students must earn an appropriate score on a placement examination or complete MAT 1033 in order to enroll in MAC 1105, or complete MAT 1100 to enroll in MGF 1106 or MGF 1107. MAT 1033 or MAT 1100 are not included in the total number of hours in this program of study.
- Students must take one of the approved Mathematics General Education Courses in this program: MAC 1105, MAC 2311, MGF 1106, MGF 1107, or STA 2023.
- Students must take one of the approved Humanities General Education Courses in this program: ARH 2000, HUM 2020, LIT 1000, MUL 1010, PHI 2010, or THE 1000.
- Students must earn 12 credits hours of electives from the following list: CET 2688C, CGS 2135C, CIS 2352C, CTS 1131C, CTS 1132C, CTS 2126C, CTS 2312C, and CTS 2830C.
- Pursuant to Rule 6A-10.02413 of the Florida Administrative Code, all degree-seeking students must demonstrate competency in civic literacy by both passing the Florida Civic Literacy Exam and by completion of either AMH 1020 (History of the United States: 1877 to the Present) or POS 2041 (American National Government). Students may also use AP or CLEP credit for one of the two courses options.



7. Students interested in earning a bachelor's degree are encouraged to earn 18 credits in General Education by completing either a 3-credit-hour science and a 3-credit hour wellness course or a 4-credit hour science and a 2-credit hour wellness course.
8. Students must take one of the approved Natural Science General Education Courses in this program: AST 1002C, BSC 1005C, BSC 1010, BSC 2085C, CHM 1045C, EVR 1001C, PHY 2020C, PHY 2048C, or PHY 2053.

Program: AS-25275 – **2022-23 Catalog Year**



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Program Map for Students Attending Part-Time

*****THIS MAP IS INTENDED FOR STUDENTS WHO ARE NEW TO THE INFORMATION TECHNOLOGY INDUSTRY.*****

| Term | Course ID | Course Title | Credits |
|--------------------------------------|--------------------------|--|-------------|
| Term 1 6 Credits | CET 1600C | Network Fundamentals | 3 Credits |
| | CTS 1131C | Computing Infrastructure | 3 Credits |
| Term 2 6 Credits | ENC 1101 | College Composition I | 3 Credits |
| | CTS 1132C | Operating Systems and Security | 3 Credits |
| Term 3 6 Credits | CET 1610C | Routing and Switching Essentials | 3 Credits |
| | CTS 2320C | Windows Server 2019 Administration | 3 Credits |
| Term 4 6 Credits | CTS 2109C | Virtualization Concepts and Implementation | 3 Credits |
| | Mathematics | Mathematics General Education Course (See Notes 2 and 3 Below) | 3 Credits |
| Term 5 6 Credits | CET 2615C | Scaling Networks | 3 Credits |
| | CTS 2376C | Firewall Services and Cybersecurity Essentials | 3 Credits |
| Term 6 6 Credits | CTS 1191C | Microsoft Azure Fundamentals | 3 Credits |
| | CIS 2772C | CCNA Cybersecurity Operations | 3 Credits |
| Term 7 6 Credits | CTS 1160C | Modern Desktop Administrator | 3 Credits |
| | Humanities | Humanities General Education Course (See Note 4 Below) | 3 Credits |
| Term 8 6 Credits | CTS 2192C | Microsoft Azure Administrator | 3 Credits |
| | AMH 1020, or POS 2041 | History of the United States: 1877 to Present, or American National Government (See Note 5 Below) | 3 Credits |
| Term 9 6 Credits | CTS 2321C | Linux+ | 3 Credits |
| | Elective | Approved Elective (See Note 6 Below) | 3 Credits |
| Term 10 6-8 Credits | CET 2940 | Network Engineering Technology Practicum | 1 Credit |
| | Wellness | Wellness General Education Course (See Note 7 Below) | 2-3 Credits |
| | Natural Science | Natural Science General Education Course (See Notes 7 and 8 Below) | 3-4 Credits |

Total Required Program Credit Hours: 60

A Few Notes

- Students must meet all graduation requirements. To learn more about graduation requirements, [please refer to the College Catalog](#).
- Students must earn an appropriate score on a placement examination or complete MAT 1033 in order to enroll in MAC 1105, or complete MAT 1100 to enroll in MGF 1106 or MGF 1107. MAT 1033 or MAT 1100 are not included in the total number of hours in this program of study.
- Students must take one of the approved Mathematics General Education Courses in this program: MAC 1105, MAC 2311, MGF 1106, MGF 1107, or STA 2023.
- Students must take one of the approved Humanities General Education Courses in this program: ARH 2000, HUM 2020, LIT 1000, MUL 1010, PHI 2010, or THE 1000.



5. Pursuant to Rule 6A-10.02413 of the Florida Administrative Code, all degree-seeking students must demonstrate competency in civic literacy by both passing the Florida Civic Literacy Exam and by completion of either AMH 1020 (History of the United States: 1877 to the Present) or POS 2041 (American National Government). Students may also use AP or CLEP credit for one of the two courses options.
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Program: AS-25275 – **2022-23 Catalog Year**



Program Map for Students Attending Part-Time

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|--------------------------------------|--------------------------|--|-------------|
| Term 1 6 Credits | CET 1600C | Network Fundamentals | 3 Credits |
| | CTS 1131C | Computing Infrastructure | 3 Credits |
| Term 2 6 Credits | ENC 1101 | College Composition I | 3 Credits |
| | Mathematics | Mathematics General Education Course (See Notes 2 and 3 Below) | 3 Credits |
| Term 3 6 Credits | CET 1610C | Routing and Switching Essentials | 3 Credits |
| | CTS 2320C | Windows Server 2019 Administration | 3 Credits |
| Term 4 6 Credits | CTS 2109C | Virtualization Concepts and Implementation | 3 Credits |
| | Humanities | Humanities General Education Course (See Note 4 Below) | 3 Credits |
| Term 5 6 Credits | CET 2615C | Scaling Networks | 3 Credits |
| | CTS 2376C | Firewall Services and Cybersecurity Essentials | 3 Credits |
| Term 6 6 Credits | CTS 1191C | Microsoft Azure Fundamentals | 3 Credits |
| | CTS 2192C | Microsoft Azure Administrator | 3 Credits |
| Term 7 6 Credits | CTS 2772C | CCNA Cybersecurity Operations | 3 Credits |
| | Elective | Approved Elective (See Note 5 Below) | 3 Credits |
| Term 8 6 Credits | AMH 1020, or POS 2041 | History of the United States: 1877 to Present, or American National Government (See Note 6 Below) | 3 Credits |
| | CTS 2321C | Linux+ | 3 Credits |
| Term 9 6 Credits | Elective | Approved Elective (See Note 5 Below) | 3 Credits |
| | Elective | Approved Elective (See Note 5 Below) | 3 Credits |
| Term 10 6-8 Credits | CET 2940 | Network Engineering Technology Practicum | 1 Credit |
| | Wellness | Wellness General Education Course (See Note 7 Below) | 2-3 Credits |
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Total Required Program Credit Hours: 60

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- Students must meet all graduation requirements. To learn more about graduation requirements, [please refer to the College Catalog](#).
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Additional Information



Minimum Graduation Requirements

To qualify for graduation at Polk State College, a student must:

1. Complete all degree-seeking admission requirements, including the submission of all necessary transcripts and other required documents.
2. Complete the required credit hours in a prescribed program of study.
3. Complete any other applicable requirements (e.g., some occupational and technical programs require a grade of C or better in all program courses).
4. Have an overall cumulative GPA of at least 2.00. A minimum cumulative program GPA of 2.0 is required for graduation with a credit or vocational certificate, or an Applied Technology Diploma.
5. **For Associate in Arts and Baccalaureate Degree programs ONLY**, satisfy the foreign language requirement for graduation, which is proficiency at college-level II (or the equivalent).
6. Complete at least 25 percent of the credit hours required for the degree or certificate through instruction offered at Polk State College.

To learn more about graduation requirements, including the foreign language proficiency requirement for AA, BAS, and BS degrees, refer to the College Catalog at <http://catalog.polk.edu/index.php>.



Career Coach

Are you interested in learning more about the careers this program will prepare you for? If so, check out Career Coach. Career Coach provides information on job openings, wages, education requirements, required skills, and job postings. You can even complete a career assessment to find careers that match your interests. To learn more about the careers that this program will prepare you for, [please visit Career Coach](#).



Polk State Pathways

Interested in exploring Program Maps for other programs and transfer intents at Polk State? Visit www.polk.edu/program-maps to view additional Pathways and Program Maps.

