**AS Degrees**

**Information Technology – AS**

**Course # , Course Title , Credits**

**Required**

CPTR1106, [Microcomputer Databases](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=1106) , 3

CPTR1108, [CISCO 1](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=1108) , 3

CPTR1122, [Microcomputer Maintenance](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=1122) , 3

CPTR1138, [Information Systems](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=1138) , 3

CPTR1148, [Microcomputer Operating System](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=1148) , 3

CPTR1170, [Web Engineering I](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=1170) , 3

CPTR2224, [Linux I](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=2224) , 3

CPTR2236, [Network Security](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=2236) , 3

CPTR2242, [Java Programming](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=2242) , 3

CPTR2272, [Network Operating Systems](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=2272) , 3

**MNTC Courses**

ENGL1101, [College Writing](http://www.minnesota.edu/?id=658&action=detail&subject=ENGL&number=1101) , 3

HUM2236, [Technology in the Humanities](http://www.minnesota.edu/?id=658&action=detail&subject=HUM&number=2236)   
[**Goal:**](http://www.minnesota.edu/programs_majors.php?prog_code=645#goalAnchor)[2](http://www.minnesota.edu/?id=658&goalArea=2&subject=), [6](http://www.minnesota.edu/?id=658&goalArea=6&subject=), [8](http://www.minnesota.edu/?id=658&goalArea=8&subject=) [\*](http://www.minnesota.edu/programs_majors.php?prog_code=645#goalAnchor) , 3

PSYC1200, [General Psychology](http://www.minnesota.edu/?id=658&action=detail&subject=PSYC&number=1200)   
[**Goal:**](http://www.minnesota.edu/programs_majors.php?prog_code=645#goalAnchor)[5](http://www.minnesota.edu/?id=658&goalArea=5&subject=), [9](http://www.minnesota.edu/?id=658&goalArea=9&subject=) [\*](http://www.minnesota.edu/programs_majors.php?prog_code=645#goalAnchor) , 3

[**MNTC Electives ...**](http://www.minnesota.edu/?id=658&goalArea=*&subject=) **, 21**

**Total Credits: 60**

**AAS Degrees**

**Computer Network Security - AAS**

**Course # , Course Title , Credits**

**Required**

CPTR1100, [Fund Computer Concepts](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=1100) , 1

CPTR1108, [CISCO 1](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=1108) , 3

CPTR1118, [CISCO 2](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=1118) , 3

CPTR2200, [CISCO 3](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=2200) , 3

CPTR2208, [CISCO 4](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=2208) , 3

CPTR2224, [Linux I](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=2224) , 3

CPTR2234, [Linux II](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=2234) , 3

CPTR2272, [Network Operating Systems](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=2272) , 3

CPTR2282, [E-mail Administration](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=2282) , 3

CSEC1102, [Careers in Information Systems](http://www.minnesota.edu/?id=658&action=detail&subject=CSEC&number=1102) , 1

CSEC1110, [Fundamentals of IT Security](http://www.minnesota.edu/?id=658&action=detail&subject=CSEC&number=1110) , 3

CSEC2202, [Introduction to Wireless Networking](http://www.minnesota.edu/?id=658&action=detail&subject=CSEC&number=2202) , 3

CSEC2204, [Managing Directory Services](http://www.minnesota.edu/?id=658&action=detail&subject=CSEC&number=2204) , 3

CSEC2210, [Security Breaches and Countermeasures](http://www.minnesota.edu/?id=658&action=detail&subject=CSEC&number=2210) , 3

CSEC2212, [Web Security](http://www.minnesota.edu/?id=658&action=detail&subject=CSEC&number=2212) , 3

CSEC2218, [Disaster Recovery](http://www.minnesota.edu/?id=658&action=detail&subject=CSEC&number=2218) , 2

CSEC2222, [Network Security Design](http://www.minnesota.edu/?id=658&action=detail&subject=CSEC&number=2222) , 3

CSEC2228, [Network Defense](http://www.minnesota.edu/?id=658&action=detail&subject=CSEC&number=2228) , 3

INTD1111, [Hands-On Programming](http://www.minnesota.edu/?id=658&action=detail&subject=INTD&number=1111) , 3

**MNTC Courses**

COMM1120, [Introduction to Public Speaking](http://www.minnesota.edu/?id=658&action=detail&subject=COMM&number=1120)   
[**Goal:**](http://www.minnesota.edu/programs_majors.php?prog_code=490#goalAnchor)[1](http://www.minnesota.edu/?id=658&goalArea=1&subject=) [\*](http://www.minnesota.edu/programs_majors.php?prog_code=490#goalAnchor) , 3

ENGL1101, [College Writing](http://www.minnesota.edu/?id=658&action=detail&subject=ENGL&number=1101) , 3

PSYC1200, [General Psychology](http://www.minnesota.edu/?id=658&action=detail&subject=PSYC&number=1200)   
[**Goal:**](http://www.minnesota.edu/programs_majors.php?prog_code=490#goalAnchor)[5](http://www.minnesota.edu/?id=658&goalArea=5&subject=), [9](http://www.minnesota.edu/?id=658&goalArea=9&subject=) [\*](http://www.minnesota.edu/programs_majors.php?prog_code=490#goalAnchor) , 3

[**MNTC Electives ...**](http://www.minnesota.edu/?id=658&goalArea=*&subject=) **, 6**

**Total Credits: 67**

**Computer Programming - AAS**

**Course # , Course Title , Credits**

**Required**

CPTR1001, [Introduction to Programming and Scripting](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=1001) , 3

CPTR1106, [Microcomputer Databases](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=1106) , 3

CPTR1110, [Visual Basic Program I](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=1110) , 3

CPTR1112, [Visual Basic Program II](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=1112) , 3

CPTR1115, [COBOL Programming](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=1115) , 4

CPTR1129, [RPG Programming](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=1129) , 4

CPTR1138, [Information Systems](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=1138) , 3

CPTR1170, [Web Engineering I](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=1170) , 3

CPTR2000, [Mobile Application Development](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=2000) , 3

CPTR2230, [Structured Query Language](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=2230) , 3

CPTR2238, [Database Integration](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=2238) , 3

CPTR2242, [Java Programming](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=2242) , 3

CPTR2400, [Web Integration](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=2400) , 3

CSCI1121, [Computer Science I](http://www.minnesota.edu/?id=658&action=detail&subject=CSCI&number=1121) , 4

**MNTC Courses**

COMM1120, [Introduction to Public Speaking](http://www.minnesota.edu/?id=658&action=detail&subject=COMM&number=1120)   
[**Goal:**](http://www.minnesota.edu/programs_majors.php?prog_code=165#goalAnchor)[1](http://www.minnesota.edu/?id=658&goalArea=1&subject=) [\*](http://www.minnesota.edu/programs_majors.php?prog_code=165#goalAnchor) , 3

ENGL1101, [College Writing](http://www.minnesota.edu/?id=658&action=detail&subject=ENGL&number=1101) , 3

[**MNTC Electives ...**](http://www.minnesota.edu/?id=658&goalArea=*&subject=) **, 9**

**Elective Credits ... , 10**

**Total Credits: 70**

**Information Technology - AAS**

**Course # , Course Title , Credits**

**Required**

CPTR1001, [Introduction to Programming and Scripting](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=1001) , 3

CPTR1106, [Microcomputer Databases](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=1106) , 3

CPTR1108, [CISCO 1](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=1108) , 3

CPTR1122, [Microcomputer Maintenance](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=1122) , 3

CPTR1138, [Information Systems](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=1138) , 3

CPTR1148, [Microcomputer Operating System](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=1148) , 3

CPTR1170, [Web Engineering I](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=1170) , 3

CPTR1178, [Robotics](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=1178) , 3

CPTR2224, [Linux I](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=2224) , 3

CPTR2236, [Network Security](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=2236) , 3

CPTR2262, [Internet Protocol Version 6](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=2262) , 3

CPTR2272, [Network Operating Systems](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=2272) , 3

**MNTC Courses**

ENGL1101, [College Writing](http://www.minnesota.edu/?id=658&action=detail&subject=ENGL&number=1101) , 3

HUM2236, [Technology in the Humanities](http://www.minnesota.edu/?id=658&action=detail&subject=HUM&number=2236)   
[**Goal:**](http://www.minnesota.edu/programs_majors.php?prog_code=649#goalAnchor)[2](http://www.minnesota.edu/?id=658&goalArea=2&subject=), [6](http://www.minnesota.edu/?id=658&goalArea=6&subject=), [8](http://www.minnesota.edu/?id=658&goalArea=8&subject=) [\*](http://www.minnesota.edu/programs_majors.php?prog_code=649#goalAnchor) , 3

PSYC1200, [General Psychology](http://www.minnesota.edu/?id=658&action=detail&subject=PSYC&number=1200)   
[**Goal:**](http://www.minnesota.edu/programs_majors.php?prog_code=649#goalAnchor)[5](http://www.minnesota.edu/?id=658&goalArea=5&subject=), [9](http://www.minnesota.edu/?id=658&goalArea=9&subject=) [\*](http://www.minnesota.edu/programs_majors.php?prog_code=649#goalAnchor) , 3

[**MNTC Electives ...**](http://www.minnesota.edu/?id=658&goalArea=*&subject=) **, 6**

**Elective Credits ... , 9**

**Total Credits: 60**

**IT Systems Support - AAS**

**Course # , Course Title , Credits**

**Required**

CPTR1104, [Intro to Computer Tech](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=1104) , 3

CPTR1106, [Microcomputer Databases](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=1106) , 3

CPTR1125, [IT Essentials](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=1125) , 3

CPTR1130, [IT Essentials 2](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=1130) , 3

CPTR1138, [Information Systems](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=1138) , 3

CPTR1142, [Network Essentials](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=1142) , 3

CPTR1148, [Microcomputer Operating System](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=1148) , 3

CPTR2236, [Network Security](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=2236) , 3

CPTR2272, [Network Operating Systems](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=2272) , 3

CTEC2204, [Advanced Technical Support](http://www.minnesota.edu/?id=658&action=detail&subject=CTEC&number=2204) , 3

CTEC2240, [Technical Support Internship](http://www.minnesota.edu/?id=658&action=detail&subject=CTEC&number=2240) , 3

INTD1111, [Hands-On Programming](http://www.minnesota.edu/?id=658&action=detail&subject=INTD&number=1111) , 3

ITSS1100, [Information Technology Help Desk](http://www.minnesota.edu/?id=658&action=detail&subject=ITSS&number=1100) , 3

ITSS1120, [Information Technology Research and Documentation](http://www.minnesota.edu/?id=658&action=detail&subject=ITSS&number=1120) , 3

ITSS2100, [Supporting End-User Applications](http://www.minnesota.edu/?id=658&action=detail&subject=ITSS&number=2100) , 3

**MNTC Courses**

COMM1120, [Introduction to Public Speaking](http://www.minnesota.edu/?id=658&action=detail&subject=COMM&number=1120)   
[**Goal:**](http://www.minnesota.edu/programs_majors.php?prog_code=566#goalAnchor)[1](http://www.minnesota.edu/?id=658&goalArea=1&subject=) [\*](http://www.minnesota.edu/programs_majors.php?prog_code=566#goalAnchor) , 3

COMM1130, [Small Group Communication](http://www.minnesota.edu/?id=658&action=detail&subject=COMM&number=1130)   
[**Goal:**](http://www.minnesota.edu/programs_majors.php?prog_code=566#goalAnchor)[1](http://www.minnesota.edu/?id=658&goalArea=1&subject=), [2](http://www.minnesota.edu/?id=658&goalArea=2&subject=) [\*](http://www.minnesota.edu/programs_majors.php?prog_code=566#goalAnchor) , 3

COMM1140, [Interpersonal Communication](http://www.minnesota.edu/?id=658&action=detail&subject=COMM&number=1140)   
[**Goal:**](http://www.minnesota.edu/programs_majors.php?prog_code=566#goalAnchor)[1](http://www.minnesota.edu/?id=658&goalArea=1&subject=) [\*](http://www.minnesota.edu/programs_majors.php?prog_code=566#goalAnchor) , 3

ENGL1101, [College Writing](http://www.minnesota.edu/?id=658&action=detail&subject=ENGL&number=1101) , 3

ENGL1215, [Professional and Technical Writing](http://www.minnesota.edu/?id=658&action=detail&subject=ENGL&number=1215)   
[**Goal:**](http://www.minnesota.edu/programs_majors.php?prog_code=566#goalAnchor)[1](http://www.minnesota.edu/?id=658&goalArea=1&subject=) [\*](http://www.minnesota.edu/programs_majors.php?prog_code=566#goalAnchor) , 3

HUM2236, [Technology in the Humanities](http://www.minnesota.edu/?id=658&action=detail&subject=HUM&number=2236)   
[**Goal:**](http://www.minnesota.edu/programs_majors.php?prog_code=566#goalAnchor)[2](http://www.minnesota.edu/?id=658&goalArea=2&subject=), [6](http://www.minnesota.edu/?id=658&goalArea=6&subject=), [8](http://www.minnesota.edu/?id=658&goalArea=8&subject=) [\*](http://www.minnesota.edu/programs_majors.php?prog_code=566#goalAnchor) , 3

PHIL1201, [Ethics](http://www.minnesota.edu/?id=658&action=detail&subject=PHIL&number=1201)   
[**Goal:**](http://www.minnesota.edu/programs_majors.php?prog_code=566#goalAnchor)[2](http://www.minnesota.edu/?id=658&goalArea=2&subject=), [6](http://www.minnesota.edu/?id=658&goalArea=6&subject=), [9](http://www.minnesota.edu/?id=658&goalArea=9&subject=) [\*](http://www.minnesota.edu/programs_majors.php?prog_code=566#goalAnchor) , 3

**Total Credits: 66**

**Network Technology Administration - AAS**

**Course # , Course Title , Credits**

**Required**

CPTR1104, [Intro to Computer Tech](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=1104) , 3

CPTR1106, [Microcomputer Databases](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=1106) , 3

CPTR1108, [CISCO 1](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=1108) , 3

CPTR1110, [Visual Basic Program I](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=1110) , 3

CPTR1118, [CISCO 2](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=1118) , 3

CPTR1125, [IT Essentials](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=1125) , 3

CPTR1148, [Microcomputer Operating System](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=1148) , 3

CPTR2200, [CISCO 3](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=2200) , 3

CPTR2208, [CISCO 4](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=2208) , 3

CPTR2236, [Network Security](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=2236) , 3

**- OR -**

CSEC1110, [Fundamentals of IT Security](http://www.minnesota.edu/?id=658&action=detail&subject=CSEC&number=1110) , 3

CPTR2245, [Enterprise Network Technologies](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=2245) , 3

CPTR2258, [Microcomputer System Projects](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=2258) , 2

CPTR2272, [Network Operating Systems](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=2272) , 3

CPTR2282, [E-mail Administration](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=2282) , 3

CSEC2204, [Managing Directory Services](http://www.minnesota.edu/?id=658&action=detail&subject=CSEC&number=2204) , 3

CVNP2212, [Voice Over IP and IP Telephony](http://www.minnesota.edu/?id=658&action=detail&subject=CVNP&number=2212) , 4

**MNTC Courses**

COMM1120, [Introduction to Public Speaking](http://www.minnesota.edu/?id=658&action=detail&subject=COMM&number=1120)   
[**Goal:**](http://www.minnesota.edu/programs_majors.php?prog_code=416#goalAnchor)[1](http://www.minnesota.edu/?id=658&goalArea=1&subject=) [\*](http://www.minnesota.edu/programs_majors.php?prog_code=416#goalAnchor) , 3

ENGL1101, [College Writing](http://www.minnesota.edu/?id=658&action=detail&subject=ENGL&number=1101) , 3

PHIL1201, [Ethics](http://www.minnesota.edu/?id=658&action=detail&subject=PHIL&number=1201)   
[**Goal:**](http://www.minnesota.edu/programs_majors.php?prog_code=416#goalAnchor)[2](http://www.minnesota.edu/?id=658&goalArea=2&subject=), [6](http://www.minnesota.edu/?id=658&goalArea=6&subject=), [9](http://www.minnesota.edu/?id=658&goalArea=9&subject=) [\*](http://www.minnesota.edu/programs_majors.php?prog_code=416#goalAnchor) , 3

[**MNTC Electives ...**](http://www.minnesota.edu/?id=658&goalArea=*&subject=) **, 6**

**Elective Credits ... , 3**

**Total Credits: 66**

**Web Development - AAS**

**Course # , Course Title , Credits**

**Required**

INTD1000, [Foundations of Web Development](http://www.minnesota.edu/?id=658&action=detail&subject=INTD&number=1000) , 3

INTD1108, [HTML](http://www.minnesota.edu/?id=658&action=detail&subject=INTD&number=1108) , 3

INTD1111, [Hands-On Programming](http://www.minnesota.edu/?id=658&action=detail&subject=INTD&number=1111) , 3

INTD1113, [Dreamweaver](http://www.minnesota.edu/?id=658&action=detail&subject=INTD&number=1113) , 3

INTD1117, [Photoshop](http://www.minnesota.edu/?id=658&action=detail&subject=INTD&number=1117) , 3

INTD1124, [Cascading Style Sheets](http://www.minnesota.edu/?id=658&action=detail&subject=INTD&number=1124) , 3

INTD1140, [JavaScript](http://www.minnesota.edu/?id=658&action=detail&subject=INTD&number=1140) , 3

INTD2210, [Interface Design](http://www.minnesota.edu/?id=658&action=detail&subject=INTD&number=2210) , 3

INTD2213, [Flash](http://www.minnesota.edu/?id=658&action=detail&subject=INTD&number=2213) , 3

INTD2226, [Web Programming](http://www.minnesota.edu/?id=658&action=detail&subject=INTD&number=2226) , 3

INTD2228, [Web Projects](http://www.minnesota.edu/?id=658&action=detail&subject=INTD&number=2228) , 3

INTD2236, [Advanced Web Programming](http://www.minnesota.edu/?id=658&action=detail&subject=INTD&number=2236) , 3

INTD2238, [Web Portfolio](http://www.minnesota.edu/?id=658&action=detail&subject=INTD&number=2238) , 3

INTD2246, [PHP](http://www.minnesota.edu/?id=658&action=detail&subject=INTD&number=2246) , 3

**MNTC Courses**

COMM1120, [Introduction to Public Speaking](http://www.minnesota.edu/?id=658&action=detail&subject=COMM&number=1120)   
[**Goal:**](http://www.minnesota.edu/programs_majors.php?prog_code=325#goalAnchor)[1](http://www.minnesota.edu/?id=658&goalArea=1&subject=) [\*](http://www.minnesota.edu/programs_majors.php?prog_code=325#goalAnchor) , 3

**- OR -**

COMM1130, [Small Group Communication](http://www.minnesota.edu/?id=658&action=detail&subject=COMM&number=1130)   
[**Goal:**](http://www.minnesota.edu/programs_majors.php?prog_code=325#goalAnchor)[1](http://www.minnesota.edu/?id=658&goalArea=1&subject=), [2](http://www.minnesota.edu/?id=658&goalArea=2&subject=) [\*](http://www.minnesota.edu/programs_majors.php?prog_code=325#goalAnchor) , 3

**- OR -**

COMM1140, [Interpersonal Communication](http://www.minnesota.edu/?id=658&action=detail&subject=COMM&number=1140)   
[**Goal:**](http://www.minnesota.edu/programs_majors.php?prog_code=325#goalAnchor)[1](http://www.minnesota.edu/?id=658&goalArea=1&subject=) [\*](http://www.minnesota.edu/programs_majors.php?prog_code=325#goalAnchor) , 3

ENGL1101, [College Writing](http://www.minnesota.edu/?id=658&action=detail&subject=ENGL&number=1101) , 3

[**MNTC Electives ...**](http://www.minnesota.edu/?id=658&goalArea=*&subject=) **, 9**

**Elective Credits ... , 6**

**Total Credits: 63**

**Diplomas**

**Information Technology - Diploma**

**Course # , Course Title , Credits**

**Required**

CPTR1104, [Intro to Computer Tech](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=1104) , 3

CPTR1106, [Microcomputer Databases](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=1106) , 3

CPTR1108, [CISCO 1](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=1108) , 3

CPTR1122, [Microcomputer Maintenance](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=1122) , 3

CPTR1138, [Information Systems](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=1138) , 3

CPTR1148, [Microcomputer Operating System](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=1148) , 3

CPTR1170, [Web Engineering I](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=1170) , 3

CPTR2224, [Linux I](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=2224) , 3

CPTR2236, [Network Security](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=2236) , 3

CPTR2242, [Java Programming](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=2242) , 3

CPTR2252, [Microcomputer Systems Project](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=2252) , 3

CPTR2272, [Network Operating Systems](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=2272) , 3

**MNTC Courses**

ENGL1101, [College Writing](http://www.minnesota.edu/?id=658&action=detail&subject=ENGL&number=1101) , 3

HUM2236, [Technology in the Humanities](http://www.minnesota.edu/?id=658&action=detail&subject=HUM&number=2236)   
[**Goal:**](http://www.minnesota.edu/programs_majors.php?prog_code=647#goalAnchor)[2](http://www.minnesota.edu/?id=658&goalArea=2&subject=), [6](http://www.minnesota.edu/?id=658&goalArea=6&subject=), [8](http://www.minnesota.edu/?id=658&goalArea=8&subject=) [\*](http://www.minnesota.edu/programs_majors.php?prog_code=647#goalAnchor) , 3

PSYC1200, [General Psychology](http://www.minnesota.edu/?id=658&action=detail&subject=PSYC&number=1200)   
[**Goal:**](http://www.minnesota.edu/programs_majors.php?prog_code=647#goalAnchor)[5](http://www.minnesota.edu/?id=658&goalArea=5&subject=), [9](http://www.minnesota.edu/?id=658&goalArea=9&subject=) [\*](http://www.minnesota.edu/programs_majors.php?prog_code=647#goalAnchor) , 3

**Elective Credits ... , 15**

**Total Credits: 60**

**IT Systems Support - Diploma**

**Course # , Course Title , Credits**

**Required**

CPTR1104, [Intro to Computer Tech](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=1104) , 3

CPTR1106, [Microcomputer Databases](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=1106) , 3

CPTR1125, [IT Essentials](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=1125) , 3

CPTR1130, [IT Essentials 2](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=1130) , 3

CPTR1138, [Information Systems](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=1138) , 3

CPTR1148, [Microcomputer Operating System](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=1148) , 3

CSEC1102, [Careers in Information Systems](http://www.minnesota.edu/?id=658&action=detail&subject=CSEC&number=1102) , 1

CTEC2204, [Advanced Technical Support](http://www.minnesota.edu/?id=658&action=detail&subject=CTEC&number=2204) , 3

ITSS1100, [Information Technology Help Desk](http://www.minnesota.edu/?id=658&action=detail&subject=ITSS&number=1100) , 3

ITSS1120, [Information Technology Research and Documentation](http://www.minnesota.edu/?id=658&action=detail&subject=ITSS&number=1120) , 3

**MNTC Courses**

ENGL1101, [College Writing](http://www.minnesota.edu/?id=658&action=detail&subject=ENGL&number=1101) , 3

**Elective Credits ... , 3**

**Total Credits: 34**

**Network Technology Administration - Diploma**

**Course # , Course Title , Credits**

**Required**

CPTR1104, [Intro to Computer Tech](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=1104) , 3

CPTR1106, [Microcomputer Databases](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=1106) , 3

CPTR1108, [CISCO 1](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=1108) , 3

CPTR1118, [CISCO 2](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=1118) , 3

CPTR1125, [IT Essentials](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=1125) , 3

CPTR1148, [Microcomputer Operating System](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=1148) , 3

CPTR2236, [Network Security](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=2236) , 3

CPTR2272, [Network Operating Systems](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=2272) , 3

SOC1111, [Intro to Sociology](http://www.minnesota.edu/?id=658&action=detail&subject=SOC&number=1111)   
[**Goal:**](http://www.minnesota.edu/programs_majors.php?prog_code=612#goalAnchor)[2](http://www.minnesota.edu/?id=658&goalArea=2&subject=), [5](http://www.minnesota.edu/?id=658&goalArea=5&subject=), [7](http://www.minnesota.edu/?id=658&goalArea=7&subject=) [\*](http://www.minnesota.edu/programs_majors.php?prog_code=612#goalAnchor) , 3

**Elective Credits ... , 6**

**Total Credits: 33**

**Web Development - Diploma**

**Course # , Course Title , Credits**

**Required**

CSEC1102, [Careers in Information Systems](http://www.minnesota.edu/?id=658&action=detail&subject=CSEC&number=1102) , 1

INTD1108, [HTML](http://www.minnesota.edu/?id=658&action=detail&subject=INTD&number=1108) , 3

INTD1113, [Dreamweaver](http://www.minnesota.edu/?id=658&action=detail&subject=INTD&number=1113) , 3

INTD1117, [Photoshop](http://www.minnesota.edu/?id=658&action=detail&subject=INTD&number=1117) , 3

INTD1124, [Cascading Style Sheets](http://www.minnesota.edu/?id=658&action=detail&subject=INTD&number=1124) , 3

INTD1130, [Electronic Commerce](http://www.minnesota.edu/?id=658&action=detail&subject=INTD&number=1130) , 3

INTD1140, [JavaScript](http://www.minnesota.edu/?id=658&action=detail&subject=INTD&number=1140) , 3

INTD1150, [Databases on the Server](http://www.minnesota.edu/?id=658&action=detail&subject=INTD&number=1150) , 3

INTD2210, [Interface Design](http://www.minnesota.edu/?id=658&action=detail&subject=INTD&number=2210) , 3

INTD2213, [Flash](http://www.minnesota.edu/?id=658&action=detail&subject=INTD&number=2213) , 3

INTD2226, [Web Programming](http://www.minnesota.edu/?id=658&action=detail&subject=INTD&number=2226) , 3

INTD2228, [Web Projects](http://www.minnesota.edu/?id=658&action=detail&subject=INTD&number=2228) , 3

INTD2231, [Emerging Technologies](http://www.minnesota.edu/?id=658&action=detail&subject=INTD&number=2231) , 1

INTD2236, [Advanced Web Programming](http://www.minnesota.edu/?id=658&action=detail&subject=INTD&number=2236) , 3

INTD2238, [Web Portfolio](http://www.minnesota.edu/?id=658&action=detail&subject=INTD&number=2238) , 3

INTD2246, [PHP](http://www.minnesota.edu/?id=658&action=detail&subject=INTD&number=2246) , 3

[**MNTC Electives ...**](http://www.minnesota.edu/?id=658&goalArea=*&subject=) **, 9**

**Elective Credits ... , 9**

**Total Credits: 62**

**Certificates**

**Cisco Networking - Certificate**

**Course # , Course Title , Credits**

**Required**

CPTR1108, [CISCO 1](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=1108) , 3

CPTR1118, [CISCO 2](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=1118) , 3

CPTR2200, [CISCO 3](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=2200) , 3

CPTR2208, [CISCO 4](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=2208) , 3

**Total Credits: 12**

**Computer Network Security - Certificate**

**Course # , Course Title , Credits**

**Required**

CPTR2236, [Network Security](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=2236) , 3

CSEC2210, [Security Breaches and Countermeasures](http://www.minnesota.edu/?id=658&action=detail&subject=CSEC&number=2210) , 3

CSEC2212, [Web Security](http://www.minnesota.edu/?id=658&action=detail&subject=CSEC&number=2212) , 3

CSEC2228, [Network Defense](http://www.minnesota.edu/?id=658&action=detail&subject=CSEC&number=2228) , 3

**Total Credits: 12**

**Health Information Technology – Technology Specialist - Certificate (Joint Department Offering)**

**Course # , Course Title , Credits**

**Required**

CPTR1001, [Introduction to Programming and Scripting](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=1001) , 3

CPTR1106, [Microcomputer Databases](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=1106) , 3

CPTR1138, [Information Systems](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=1138) , 3

CPTR1148, [Microcomputer Operating System](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=1148) , 3

CPTR2296, [Topics in Computers](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=2296) , 3

CSCI1110, [Informatics](http://www.minnesota.edu/?id=658&action=detail&subject=CSCI&number=1110) , 3

HITM1150, [Introduction to Health Care Delivery](http://www.minnesota.edu/?id=658&action=detail&subject=HITM&number=1150) , 3

HITM1155, [Medicolegal Aspects](http://www.minnesota.edu/?id=658&action=detail&subject=HITM&number=1155) , 3

HITM2204, [Fundamentals of Electronic Health Records](http://www.minnesota.edu/?id=658&action=detail&subject=HITM&number=2204) , 3

HLTH1116, [Medical Terminology](http://www.minnesota.edu/?id=658&action=detail&subject=HLTH&number=1116) , 3

**Total Credits: 30**

**IT Systems Support - Certificate**

**Course # , Course Title , Credits**

**Required**

CPTR1104, [Intro to Computer Tech](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=1104) , 3

CPTR1125, [IT Essentials](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=1125) , 3

CPTR1130, [IT Essentials 2](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=1130) , 3

CPTR1138, [Information Systems](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=1138) , 3

CPTR1142, [Network Essentials](http://www.minnesota.edu/?id=658&action=detail&subject=CPTR&number=1142) , 3

ITSS1100, [Information Technology Help Desk](http://www.minnesota.edu/?id=658&action=detail&subject=ITSS&number=1100) , 3

**Total Credits: 18**

**Voice and Video Over Internet Protocol - Certificate**

**Course # , Course Title , Credits**

**Required**

CVNP2210, [Voice, Video and Data Convergence](http://www.minnesota.edu/?id=658&action=detail&subject=CVNP&number=2210) , 4

CVNP2212, [Voice Over IP and IP Telephony](http://www.minnesota.edu/?id=658&action=detail&subject=CVNP&number=2212) , 4

CVNP2220, [Video Over Internet Protocol](http://www.minnesota.edu/?id=658&action=detail&subject=CVNP&number=2220) , 4

CVNP2222, [Voice Video Over IP Systems Project](http://www.minnesota.edu/?id=658&action=detail&subject=CVNP&number=2222) , 3

**Total Credits: 15**

**Web Development - Certificate (CIW Web Design Specialist)**

**Course # , Course Title , Credits**

**Required**

INTD1000, [Foundations of Web Development](http://www.minnesota.edu/?id=658&action=detail&subject=INTD&number=1000) , 3

INTD1108, [HTML](http://www.minnesota.edu/?id=658&action=detail&subject=INTD&number=1108) , 3

INTD1113, [Dreamweaver](http://www.minnesota.edu/?id=658&action=detail&subject=INTD&number=1113) , 3

INTD1117, [Photoshop](http://www.minnesota.edu/?id=658&action=detail&subject=INTD&number=1117) , 3

INTD1124, [Cascading Style Sheets](http://www.minnesota.edu/?id=658&action=detail&subject=INTD&number=1124) , 3

INTD1130, [Electronic Commerce](http://www.minnesota.edu/?id=658&action=detail&subject=INTD&number=1130) , 3

INTD1140, [JavaScript](http://www.minnesota.edu/?id=658&action=detail&subject=INTD&number=1140) , 3

**- OR -**

INTD1111, [Hands-On Programming](http://www.minnesota.edu/?id=658&action=detail&subject=INTD&number=1111) , 3

INTD2210, [Interface Design](http://www.minnesota.edu/?id=658&action=detail&subject=INTD&number=2210) , 3

INTD2213, [Flash](http://www.minnesota.edu/?id=658&action=detail&subject=INTD&number=2213) , 3

**Elective Credits ... , 3**

**Total Credits: 30**