# Articulation agreements between Central Lakes College (CLC), and The College of St. Scholastica (CSS)

These four agreements allow graduates of CLC's 2-year IT AAS degree programs to transfer their credits to CSS's Bachelor's degree in Computer Information Systems.

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## Central Lakes College Transfer Guide for Computer Information Systems End User Computing Custom Concentration

For students planning to transfer to The College of St. Scholastica and major in Computer Information Systems following departmental equivalencies are provided. The table below lists The College of St. Scholastica's CIS major requirements along with equivalent courses at Central Lakes College. In addition to the major core requirements, students must also complete coursework that satisfies the CSS general education requirements. The College of St. Scholastica accepts the Minnesota Transfer Curriculum (MnTC) as satisfying the College's lower division general education requirements except for the religious studies requirement.

| Computer Information Technology<br>Equivalent or Substitution   | B.S. CIS Program                                |
|---|---|
| The College of St. Scholastica accepts the Minnesota<br>Transfer Curriculum (MnTC) as satisfying the<br>College's lower division general education<br>requirements except for the religious studies<br>requirement. | CSS General Education Requirements              |
| PHIL 1411 World Religions   | Religious Studies                               |
| Complete at The College of St. Scholastica  | Writing Intensive                               |
| COMP 1120 Introduction to Computer Applications   | CIS 1004 Computing Concepts                     |
| Complete at The College of St. Scholastica  | CIS 1007 Introduction to Databases              |
| COMP 1204 Computer Repair I   | CIS 2011 Hardware/Software Systems              |
| Complete at The College of St. Scholastica  | CIS 2085 Programming I with Java                |
| Complete at The College of St. Scholastica  | CIS 2087 Programming II with Java               |
| Complete at The College of St. Scholastica  | CIS 3105 MIS / CIS 3089 Data Structures         |
| Complete at The College of St. Scholastica  | CIS 3107 Database Modeling                      |
| Complete at The College of St. Scholastica  | CIS 3108 Systems Analysis and Design            |
| Complete at The College of St. Scholastica  | CIS 4109 Systems Development Implementation     |
| Complete at The College of St. Scholastica  | CIS 4555 Software Develop. Internship (4-16 cr) |
| MATH 1460 Intro to Statistics, 1477 Calculus, or<br>PHIL 1460 Logic (MATH 1460 recommended) OR<br>complete at CSS   | Discrete Math, Logic, Calculus, or Statistics   |
| Complete at The College of St. Scholastica  | Upper Division CIS Elective                     |
| COMP 2202 Computer User Support   | Upper Division CIS Elective                     |
| COMP 1230 Network Essentials  | Upper Division CIS Elective                     |
|   | End User Computing - Custom Concentration       |
| COMP 2111 Security Essentials   | Custom Concentration Course 1                   |
| COMP 1253 Client Operating Systems Admin  | Custom Concentration Course 2                   |
| COMP 2153 Client Operating Systems Mgt.   | Custom Concentration Course 3                   |
| COMP 2170 Linux Systems   | Custom Concentration Course 4                   |



### About The College of St. Scholastica's Computer Information Systems Program

The 100 percent online Bachelor of Arts/Science in Computer Information Systems offers students a flexible and convenient path into the rapidly evolving IT career field. Graduates of the program will be skilled in the following areas:

- Analysis, design and construction of solutions to simple and complex problems.
- Evaluation, selection and application of methods and software tools to meet organizational needs.
- Communication of ideas through oral presentations, written documents and software documentation.
- Working effectively as a member of a team to complete a project under project management direction.
- Articulation and application of personal and organizational values within the context of professional codes of ethics.
- Researching, learning and applying new technologies and/or methodologies.

### The College of St. Scholastica's CIS Program Benefits

- Preparation for a variety of IT-related careers
- > Available in a fully online format with concentrations in healthcare or management
- > Students work with an advisor to design a unique degree completion plan that fits their needs

### Transferring to The College of St. Scholastica from Central Lakes College

The College of St. Scholastica accepts the Minnesota Transfer Curriculum (MnTC) as satisfying the College's lower division general education requirements except for the religious studies requirement. The College also accepts credits in transfer to satisfy major requirements as noted in this guide. Grades earned must be a C or better for transfer. To transfer credits an official transcript must be sent directly to St. Scholastica.

### **Career Opportunities**

CS/CIS graduates are prepared for a variety of IT-related careers, from web development to systems analysis to software engineering. In a field as dynamic as Computer Science, your future job may not even exist yet!

According to the Bureau of Labor Statistics, employment for computer network, systems and database administrators is expected to grow by 28 percent over the next decade. This broad category includes web developers, web administrators and other computer-related positions.

### **Requirements for Admission to the CIS Program**

- High school diploma or GED
- Cumulative GPA of at least 2.0 for entrance into the college

Note: Meeting minimum entrance requirements does not guarantee admission. The College may still consider applicants with a lower GPA through a special status committee; contact an admissions counselor to learn more.

#### St. Scholastica Graduation Requirements

- Minimum 128 semester credits earned
- Minimum 42 upper division credits (at or above the 3000 level)
- Last 32 credits taken at The College of St. Scholastica, 16 credits in the major
- > Complete the requirements for general education and your major
- Meet all GPA requirements for the major

For more information contact:

Amie Anderson Brainerd Center Manager (877) 287-8752 aander10@css.edu



## Central Lakes College Transfer Guide for Computer Information Systems Computer Security Custom Concentration

For students planning to transfer to The College of St. Scholastica (CSS) and major in Computer Information Systems the following departmental equivalencies are provided. The table below lists The College of St. Scholastica's CIS major requirements along with equivalent courses at Central Lakes College (CLC). In addition to the major core requirements, students must also complete coursework that satisfies the CSS general education requirements. The College of St. Scholastica accepts the Minnesota Transfer Curriculum (MnTC) as satisfying the College's lower division general education requirements except for the religious studies requirement.

| CNA – Cyber Security<br>Equivalent or Substitution  | B.S. CIS Program                                |
|---|---|
| The College of St. Scholastica accepts the Minnesota<br>Transfer Curriculum (MnTC) as satisfying the<br>College's lower division general education<br>requirements except for the religious studies<br>requirement. | CSS General Education Requirements              |
| PHIL 1411 World Religions   | Religious Studies                               |
| Complete at The College of St. Scholastica  | Writing Intensive                               |
| Waived for students with AAS-CNA Cyber Security   | CIS 1004 Computing Concepts                     |
| Complete at The College of St. Scholastica  | CIS 1007 Introduction to Databases              |
| COMP 1122 IT Essentials   | CIS 2011 Hardware/Software Systems              |
| Complete at The College of St. Scholastica  | CIS 2085 Programming I with Java                |
| Complete at The College of St. Scholastica  | CIS 2087 Programming II with Java               |
| Complete at The College of St. Scholastica  | CIS 3105 MIS / CIS 3089 Data Structures         |
| Complete at The College of St. Scholastica  | CIS 3107 Database Modeling                      |
| Complete at The College of St. Scholastica  | CIS 3108 Systems Analysis and Design            |
| Complete at The College of St. Scholastica  | CIS 4109 Systems Development Implementation     |
| Complete at The College of St. Scholastica  | CIS 4555 Software Develop. Internship (4-16 cr) |
| MATH 1460 Intro to Statistics, MATH 1477<br>Calculus, or PHIL 1460 Logic (MATH 1460<br>recommended) OR complete at CSS.   | Discrete Math, Logic, Calc, or Statistics       |
| Complete at The College of St. Scholastica  | Upper Division CIS Elective                     |
| COMP 2130 Scaling Networks  | Upper Division CIS Elective                     |
| COMP 2155 Network Intrusion   | Upper Division CIS Elective                     |
|   | Computer Security Custom Concentration          |
| COMP 2111 Security Essentials   | Custom Concentration Elective 1                 |
| COMP 2150 Windows Server Administration   | Custom Concentration Elective 2                 |
| COMP 2115 Command Line Administration   | Custom Concentration Elective 3                 |
| COMP 2154 Advanced Network Defense  | Custom Concentration Elective 4                 |



### About The College of St. Scholastica's Computer Information Systems Program

The 100 percent online Bachelor of Arts/Science in Computer Information Systems offers students a flexible and convenient path into the rapidly evolving IT career field. Graduates of the program will be skilled in the following areas:

- Analysis, design and construction of solutions to simple and complex problems.
- Evaluation, selection and application of methods and software tools to meet organizational needs.
- Communication of ideas through oral presentations, written documents and software documentation.
- Working effectively as a member of a team to complete a project under project management direction.
- Articulation and application of personal and organizational values within the context of professional codes of ethics.
- Researching, learning and applying new technologies and/or methodologies.

### The College of St. Scholastica's CIS Program Benefits

- Preparation for a variety of IT-related careers
- > Available in a fully online format with concentrations in healthcare or management
- > Students work with an advisor to design a unique degree completion plan that fits their needs

### Transferring to The College of St. Scholastica from Central Lakes College

The College of St. Scholastica accepts the Minnesota Transfer Curriculum (MnTC) as satisfying the College's lower division general education requirements except for the religious studies requirement. The College also accepts credits in transfer to satisfy major requirements as noted in this guide. Grades earned must be a C or better for transfer. To transfer credits an official transcript must be sent directly to St. Scholastica.

### **Career Opportunities**

CS/CIS graduates are prepared for a variety of IT-related careers, from web development to systems analysis to software engineering. In a field as dynamic as Computer Science, your future job may not even exist yet!

According to the Bureau of Labor Statistics, employment for computer network, systems and database administrators is expected to grow by 28 percent over the next decade. This broad category includes web developers, web administrators and other computer-related positions.

### **Requirements for Admission to the CIS Program**

- High school diploma or GED
- Cumulative GPA of at least 2.0 for entrance into the college

Note: Meeting minimum entrance requirements does not guarantee admission. The College may still consider applicants with a lower GPA through a special status committee; contact an admissions counselor to learn more.

#### St. Scholastica Graduation Requirements

- Minimum 128 semester credits earned
- Minimum 42 upper division credits (at or above the 3000 level)
- Last 32 credits taken at The College of St. Scholastica, 16 credits in the major
- > Complete the requirements for general education and your major
- Meet all GPA requirements for the major

#### For more information contact:

Amie Anderson Center Manager (877) 287-8752 aander10@css.edu



### Central Lakes College Transfer Guide for Computer Information Systems Network Administration Custom Concentration

For students planning to transfer to The College of St. Scholastica (CSS) and major in Computer Information Systems the following departmental equivalencies are provided. The table below lists The College of St. Scholastica's CIS major requirements along with equivalent courses at Central Lakes College (CLC). In addition to the major core requirements, students must also complete coursework that satisfies the CSS general education requirements. The College of St. Scholastica accepts the Minnesota Transfer Curriculum (MnTC) as satisfying the College's lower division general education requirements except for the religious studies requirement.

| Computer Network Administration<br>Equivalent or Substitution   | B.S. CIS Program                                |
|---|---|
| The College of St. Scholastica accepts the Minnesota<br>Transfer Curriculum (MnTC) as satisfying the<br>College's lower division general education<br>requirements except for the religious studies<br>requirement. | CSS General Education Requirements              |
| PHIL 1411 World Religions   | Religious Studies                               |
| Complete at The College of St. Scholastica  | Writing Intensive                               |
| COMP 1120 Introduction to Computer Applications   | CIS 1004 Computing Concepts                     |
| Complete at The College of St. Scholastica  | CIS 1007 Introduction to Databases              |
| COMP 1204 Computer Repair I   | CIS 2011 Hardware/Software Systems              |
| Complete at The College of St. Scholastica  | CIS 2085 Programming I with Java                |
| Complete at The College of St. Scholastica  | CIS 2087 Programming II with Java               |
| Complete at The College of St. Scholastica  | CIS 3105 MIS / CIS 3089 Data Structures         |
| Complete at The College of St. Scholastica  | CIS 3107 Database Modeling                      |
| Complete at The College of St. Scholastica  | CIS 3108 Systems Analysis and Design            |
| Complete at The College of St. Scholastica  | CIS 4109 Systems Development Implementation     |
| Complete at The College of St. Scholastica  | CIS 4555 Software Develop. Internship (4-16 cr) |
| MATH 1460 Intro to Statistics, MATH 1477<br>Calculus, or PHIL 1460 Logic (MATH 1460<br>recommended)   | Discrete Math, Logic, Calculus, or Statistics   |
| Complete at The College of St. Scholastica  | Upper Division CIS Elective                     |
| COMP 2111 Security Essentials   | Upper Division CIS Elective                     |
| COMP 1230 Network Essentials  | Upper Division CIS Elective                     |
|   | Network Administration Custom Concentration     |
| COMP 2150 Windows Server Administration I   | Custom Concentration Course 1                   |
| COMP 2151 Windows Server Administration II  | Custom Concentration Course 2                   |
| COMP 2152 Windows Server Administration III   | Custom Concentration Course 3                   |
| COMP 2115 Command Line Administration   | Custom Concentration Course 4                   |



### About The College of St. Scholastica's Computer Information Systems Program

The 100 percent online Bachelor of Arts/Science in Computer Information Systems offers students a flexible and convenient path into the rapidly evolving IT career field. Graduates of the program will be skilled in the following areas:

- Analysis, design and construction of solutions to simple and complex problems.
- Evaluation, selection and application of methods and software tools to meet organizational needs.
- Communication of ideas through oral presentations, written documents and software documentation.
- Working effectively as a member of a team to complete a project under project management direction.
- Articulation and application of personal and organizational values within the context of professional codes of ethics.
- Researching, learning and applying new technologies and/or methodologies.

### The College of St. Scholastica's CIS Program Benefits

- Preparation for a variety of IT-related careers
- > Available in a fully online format with concentrations in healthcare or management
- > Students work with an advisor to design a unique degree completion plan that fits their needs

### Transferring to The College of St. Scholastica from Central Lakes College

The College of St. Scholastica accepts the Minnesota Transfer Curriculum (MnTC) as satisfying the College's lower division general education requirements except for the religious studies requirement. The College also accepts credits in transfer to satisfy major requirements as noted in this guide. Grades earned must be a C or better for transfer. To transfer credits an official transcript must be sent directly to St. Scholastica.

### **Career Opportunities**

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According to the Bureau of Labor Statistics, employment for computer network, systems and database administrators is expected to grow by 28 percent over the next decade. This broad category includes web developers, web administrators and other computer-related positions.

### **Requirements for Admission to the CIS Program**

- High school diploma or GED
- Cumulative GPA of at least 2.0 for entrance into the college

Note: Meeting minimum entrance requirements does not guarantee admission. The College may still consider applicants with a lower GPA through a special status committee; contact an admissions counselor to learn more.

#### St. Scholastica Graduation Requirements

- Minimum 128 semester credits earned
- Minimum 42 upper division credits (at or above the 3000 level)
- Last 32 credits taken at The College of St. Scholastica, 16 credits in the major
- > Complete the requirements for general education and your major
- Meet all GPA requirements for the major

For more information contact:

Amie Anderson Center Manager (877) 287-8752 aander10@css.edu



### Central Lakes College Transfer Guide for Computer Information Systems Network Administration Custom Concentration

For students planning to transfer to The College of St. Scholastica and major in Computer Information Systems the following departmental equivalencies are provided. The table below lists The College of St. Scholastica's CIS major requirements along with equivalent courses at Central Lakes College. In addition to the major core requirements, students must also complete coursework that satisfies the CSS general education requirements. The College of St. Scholastica accepts the Minnesota Transfer Curriculum (MnTC) as satisfying the College's lower division general education requirements except for the religious studies requirement.

| Computer Network Administration - Cisco<br>Equivalent or Substitution   | B.S. CIS Program                                |
|---|---|
| The College of St. Scholastica accepts the Minnesota<br>Transfer Curriculum (MnTC) as satisfying the<br>College's lower division general education<br>requirements except for the religious studies<br>requirement. | CSS General Education Requirements              |
| PHIL 1411 World Religions   | Religious Studies                               |
| Complete at The College of St. Scholastica  | Writing Intensive                               |
| Waived w/ AAS in Computer Network Adm-Cisco   | CIS 1004 Computing Concepts                     |
| Complete at The College of St. Scholastica  | CIS 1007 Introduction to Databases              |
| COMP 1122 IT Essentials   | CIS 2011 Hardware/Software Systems              |
| Complete at The College of St. Scholastica  | CIS 2085 Programming I with Java                |
| Complete at The College of St. Scholastica  | CIS 2087 Programming II with Java               |
| Complete at The College of St. Scholastica  | CIS 3105 MIS / CIS 3089 Data Structures         |
| Complete at The College of St. Scholastica  | CIS 3107 Database Modeling                      |
| Complete at The College of St. Scholastica  | CIS 3108 Systems Analysis and Design            |
| Complete at The College of St. Scholastica  | CIS 4109 Systems Development Implementation     |
| Complete at The College of St. Scholastica  | CIS 4555 Software Develop. Internship (4-16 cr) |
| MATH 1460 Intro to Statistics, 1477 Calculus, or<br>PHIL 1460 Logic (MATH 1460 recommended)   | Discrete Math, Logic, Calc, or Statistics       |
| Complete at The College of St. Scholastica  | Upper Division CIS Elective                     |
| COMP 2130 Scaling Networks  | Upper Division CIS Elective                     |
| COMP 2131 Connecting Networks   | Upper Division CIS Elective                     |
|   | Network Administration Custom Concentration     |
| COMP 2150 Windows Server Administration I   | Custom Concentration Elective 1 (5 cr.)         |
| COMP 2115 Command Line Administration   | Custom Concentration Elective 2 (4 cr.)         |
| COMP 2170 Linux Systems   | Custom Concentration Elective 3 (4 cr.)         |
| COMP 2132 Cisco IOS Security AND 2133 VOIP  | Custom Concentration Elective 4 (3 cr.)         |



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### The College of St. Scholastica's CIS Program Benefits

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- Last 32 credits taken at The College of St. Scholastica, 16 credits in the major
- > Complete the requirements for general education and your major
- Meet all GPA requirements for the major

For more information contact:

Amie Anderson Center Manager (877) 287-8752 aander10@css.edu