

# INFORMATION TECHNOLOGY CONCENTRATION

## Program Description

The **Information Technology Concentration** within the Associate in Science in Computer Science is designed for students who plan to transfer to a four-year institution to pursue a bachelor's degree in information technology, computer science, information systems, or a related computing field.

This concentration focuses on the practical use and management of computer systems, networks, and information technologies that support modern organizations. Students develop foundational skills in programming, networking, systems administration, and technology troubleshooting while learning how computing infrastructure supports business and operational needs. Coursework emphasizes problem-solving, technical communication, and the effective use of computing tools and systems.

The program provides a strong foundation in computing concepts while preparing students for upper-level study in information technology and related technology disciplines.

## Transfer Information

The Information Technology concentration is structured to align with bachelor's degree programs in information technology, information systems, computer science, and related fields.

Students are encouraged to work closely with faculty and Advising & Transfer Services to ensure coursework aligns with the requirements of their intended transfer institution. Because technology programs often require specific programming and technical prerequisites, students should carefully follow the recommended course sequence.

Students planning to transfer within New Jersey should explore the "Transfer Programs" feature on NJ Transfer ([www.njtransfer.org](http://www.njtransfer.org) (<http://www.njtransfer.org>)) to review articulation agreements and institutional requirements.

## Career Information

The A.S. in Computer Science – Information Technology Concentration is designed primarily for transfer. A bachelor's degree is typically required for advanced roles in information technology and computing.

With further education, graduates may pursue careers such as:

- Information Technology Specialist
- Systems Administrator
- Network Administrator
- IT Support Manager
- Systems or Business Analyst

Students are encouraged to consult with faculty and Career Services early in their academic journey to explore transfer pathways, internships, and career opportunities in information technology and computing fields.

Fall One		Credit Hours
ENGL 151	English I	3
STSC 150	Student Success Seminar	2
MATH 166	Topics in Algebra	4
CSIT 165	Programming I	4
<b>Credit Hours</b>		<b>13</b>

Spring One		Credit Hours
ENGL 152	English II	3
MATH 196	Precalculus	4
CSIT 144	Introduction to Operating System Using Linux	3
CSIT 176	Computer Organization & Architecture	3
Social Science Gen. Ed. Requirement ( <a href="https://catalog.ocean.edu/academic-information/general-education/">https://catalog.ocean.edu/academic-information/general-education/</a> )		3
<b>Credit Hours</b>		<b>16</b>

Fall Two		Credit Hours
MATH 265	Calculus I	4
CSIT 212	Systems Analysis	3
CSIT 251	Introduction to Networking	3
CSIT 213	Database Management	3
Humanities Gen. Ed. Requirement ( <a href="https://catalog.ocean.edu/academic-information/general-education/">https://catalog.ocean.edu/academic-information/general-education/</a> )		3
<b>Credit Hours</b>		<b>16</b>

Spring Two		Credit Hours
MATH 270	Discrete Mathematics <sup>1</sup>	3
CSIT 168 or CSIT 243	Introduction to Python Programming or Cisco Networking Fundamentals	2
CSIT 200	Information Security Fundamentals	3
PHYS 281 & 281L	General Physics I Lecture and General Physics I Lab	4
Humanities or Social Science Gen. Ed. Requirement ( <a href="https://catalog.ocean.edu/academic-information/general-education/">https://catalog.ocean.edu/academic-information/general-education/</a> )		3
<b>Credit Hours</b>		<b>15</b>
<b>Total Credit Hours</b>		<b>60</b>

<sup>1</sup> The pre-requisite for MATH 270 is MATH 265 with a grade of B or better. Students who don't meet this requirement should take MATH 266.

Fall One		Credit Hours
ENGL 151	English I	3
STSC 150	Student Success Seminar	2
MATH 196	Precalculus	4
CSIT 165	Programming I	4
Humanities Gen. Ed. Requirement ( <a href="https://catalog.ocean.edu/academic-information/general-education/">https://catalog.ocean.edu/academic-information/general-education/</a> )		3
<b>Credit Hours</b>		<b>16</b>

Spring One		Credit Hours
ENGL 152	English II	3
MATH 265	Calculus I	4
CSIT 144	Introduction to Operating System Using Linux	3
CSIT 176	Computer Organization & Architecture	3
Social Science Gen. Ed. Requirement ( <a href="https://catalog.ocean.edu/academic-information/general-education/">https://catalog.ocean.edu/academic-information/general-education/</a> )		3
<b>Credit Hours</b>		<b>16</b>

Fall Two		Credit Hours
MATH 266	Calculus II	4
CSIT 251	Introduction to Networking	3
CSIT 212	Systems Analysis	3
CSIT 213	Database Management	3
Humanities or Social Science Gen. Ed. Requirement ( <a href="https://catalog.ocean.edu/academic-information/general-education/">https://catalog.ocean.edu/academic-information/general-education/</a> )		3
<b>Credit Hours</b>		<b>16</b>

**Spring Two**

MATH 270	Discrete Mathematics	3
CSIT 168 or CSIT 243	Introduction to Python Programming or Cisco Networking Fundamentals	2
CSIT 200	Information Security Fundamentals	3
PHYS 281 & 281L	General Physics I Lecture and General Physics I Lab	4
<b>Credit Hours</b>		<b>12</b>
<b>Total Credit Hours</b>		<b>60</b>

**Fall One****Credit Hours**

ENGL 151	English I	3
STSC 150	Student Success Seminar	2
MATH 265	Calculus I	4
CSIT 165	Programming I	4
Humanities Gen. Ed. Requirement ( <a href="https://catalog.ocean.edu/academic-information/general-education/">https://catalog.ocean.edu/academic-information/general-education/</a> )		3
<b>Credit Hours</b>		<b>16</b>

**Spring One**

ENGL 152	English II	3
MATH 266	Calculus II	4
CSIT 144	Introduction to Operating System Using Linux	3
CSIT 176	Computer Organization & Architecture	3
Social Science Gen. Ed. Requirement ( <a href="https://catalog.ocean.edu/academic-information/general-education/">https://catalog.ocean.edu/academic-information/general-education/</a> )		3
<b>Credit Hours</b>		<b>16</b>

**Fall Two**

CSIT 212	Systems Analysis	3
CSIT 213	Database Management	3
CSIT 251	Introduction to Networking	3
PHYS 281 & 281L	General Physics I Lecture and General Physics I Lab	4
<b>Credit Hours</b>		<b>13</b>

**Spring Two**

CSIT 200	Information Security Fundamentals	3
CSIT 243	Cisco Networking Fundamentals	3
CSIT 261 or CSIT 277	Advanced Networking Concepts or Introduction to Cloud Computing	3
MATH 270	Discrete Mathematics	3
Humanities or Social Science Gen. Ed. Requirement ( <a href="https://catalog.ocean.edu/academic-information/general-education/">https://catalog.ocean.edu/academic-information/general-education/</a> )		3
<b>Credit Hours</b>		<b>15</b>
<b>Total Credit Hours</b>		<b>60</b>