

Degree Guide:

Associate in Computer Science, Direct Transfer Agreement/ Major Related Program (DTA/MRP)

Program Computer Science (CS/CS&) Degree Type Transfer Degree

Degree Requirements

The Associate in Computer Science, Direct Transfer Agreement/Major Related Program (DTA/MRP) is applicable to students planning to prepare for computer science and related majors at universities and colleges in Washington. This degree guide meets all of the requirements of the Direct Transfer Agreement (DTA).

Students should check specific requirements of their intended transfer institution, including overall minimum GPA, a higher GPA in a selected subset of courses or a specific minimum grade in one or more courses such as math or English. To qualify for this degree, you must complete a minimum of 90 credits in courses numbered 100 or above, with a cumulative grade point average (GPA) of 2.0 or better. Computer Science programs are competitive and may require a higher GPA overall or a higher GPA in specific courses.

View the <u>Associate in Computer Science DTA/MRP document</u> for specific university requirements and confer with your advisor.

Program Code: CSACSAA

Communication Skills

| Catalog # | Course Title | Credits |
|-----------|-----------------------|---------|
| ENGL& 101 | English Composition I | 5 |
| ENGL& 235 | Technical Writing | 5 |

Quantitative Skills

| Catalog # | Course Title | Credits |
|-----------|--------------|---------|
| MATH& 151 | Calculus I | 5 |

MATH& 141 and MATH& 142 are required prerequisites and count as electives in Remaining Credits.

Humanities

| Catalog # | Course Title | Credits |
|---|--------------|---------|
| Humanities Distribution List (Computer Science) | | 15 |



Natural Sciences

| Catalog # | Course Title | Credits |
|-----------|---------------------------------|---------|
| PHYS& 221 | Engineering Physics I with Lab | 5 |
| PHYS& 222 | Engineering Physics II with Lab | 5 |
| MATH& 152 | Calculus II | 5 |

Social Sciences

| Catalog # | Course Title | Credits |
|--|--------------|---------|
| Social Sciences Distribution List (Computer Science) | | 15 |

Pre-Major Requirements

| Catalog # | Course Title | Credits |
|-----------|-------------------------------|---------|
| CS& 141 | Computer Science I with Java | 5 |
| CS 142 | Computer Science II with Java | 5 |

<u>CS100</u> is strongly recommended for students new to computer programming as a prerequisite to <u>CS&141</u>.

Remaining Credits

Work with an advisor to choose electives based on your interests, planned major, and transfer institution.

| Catalog # | Course Title | Credits |
|--------------------------|----------------------------------|---------|
| Elective | | 5 |
| Elective or MATH& 141 | | 5 |
| Elective or MATH& 142 | | 5 |
| PHYS& 223 | Engineering Physics III with Lab | 5 |

Elective + MATH& 141 and MATH& 142 may be used if taken as a prerequisite for MATH& 151.

| Total Credits 90 | |
|------------------|--|
|------------------|--|



Sample Schedule

First Quarter (Fall)

| Catalog # | Course Title | Credits |
|-----------|----------------------------------|---------|
| CS100 | Introduction to Computer Science | 5 |
| ENGL& 101 | English Composition I | 5 |
| MATH& 141 | Precalculus I | 5 |

Second Quarter (Winter)

| Catalog # | Course Title | Credits |
|-----------|------------------------------|---------|
| CS&141 | Computer Science I with Java | 5 |
| ENGL& 235 | Technical Writing | 5 |
| MATH& 142 | Precalculus II | 5 |

Third Quarter (Spring)

| Catalog # | Course Title | Credits |
|-----------------|-------------------------------|---------|
| CS 142 | Computer Science II with Java | 5 |
| Humanities | | 5 |
| Social Sciences | | 5 |

Fourth Quarter (Fall)

| Catalog # | Course Title | Credits |
|-----------------|--------------------------------|---------|
| MATH& 151 | Calculus I | 5 |
| PHYS& 221 | Engineering Physics I with Lab | 5 |
| Social Sciences | | 5 |

Fifth Quarter (Winter)

| Catalog # | Course Title | Credits |
|------------|---------------------------------|---------|
| Humanities | | 5 |
| MATH& 152 | Calculus II | 5 |
| PHYS& 222 | Engineering Physics II with Lab | 5 |



Sixth Quarter (Spring)

| Catalog # | Course Title | Credits |
|-----------------|----------------------------------|---------|
| Humanities | | 5 |
| PHYS& 223 | Engineering Physics III with Lab | 5 |
| Social Sciences | | 5 |

Student Learning Outcomes

Communication Competencies

- · Comprehend the difference between written opinions vs ideas supported by scientific inquiry.
- Demonstrate the ability to communicate scientific ideas and the process of science.

Quantitative Reasoning

- Manipulate numbers (large and small), use common measurement systems, and solve simple linear algebraic problems.
- Recognize functional relationships between and among measurable phenomena.
- · Apply systematic approaches and logic to solving quantitative problems.
- Translate mathematical symbols into words and words into mathematical symbols.
- · Demonstrate the ability to use modeling and simulation to solve scientific problems.

Information Competencies

- Recognize the difference between questions of high scientific impact vs those unlikely to provide critical information about a scientific phenomenon or process.
- · Ability to apply the process of science.

Critical Thinking

- · Identify and troubleshoot scientific problems.
- Demonstrate the ability to use quantitative reasoning and analyze data.
- Demonstrate the ability to apply the process of science.

Personal and Interpersonal Competencies

- Gain an understanding of the relationships between science and society.
- Gain familiarity with and an appreciation for the interdisciplinary nature of science.
- Demonstrate the ability to collaborate and understand the importance of collaboration in science.