

INFORMATION TECHNOLOGY, BACHELOR OF SCIENCE

Requirements

Total Course Requirements for the Bachelor's Degree

See the "Requirements for the Bachelor's Degree (<https://catalog.csudh.edu/general-information/baccalaureate-degrees-undergraduate-studies/>)" in the University Catalog for complete details on general degree requirements. A minimum of 40 units, including those required for the major, must be upper division.

Elective Requirements

Completion of elective courses (beyond the requirements listed below) to reach a total of a minimum of 120 units.

General Education Requirements (49 units)

See the "General Education (<https://catalog.csudh.edu/general-information/double-counting-general-education-courses/general-education/>)" requirements in the University Catalog or the Class Schedule for the most current information on General Education requirements and course offerings.

Graduation Writing Assessment Requirement

See the "Graduation Writing Assessment Requirement (<https://catalog.csudh.edu/general-information/graduate-writing-examination/>)" in the University Catalog.

Minor Requirements

Single field major, no minor required.

Major Requirements (73 units)

Students entering the Information Technology program must complete the following:

1. Earn an overall grade point average of 2.0 or better in courses taken outside of the department;
2. Earn a grade of "C" or better in each course taken within the department;
3. Students must take capstone course ITC 492 Senior Design at CSUDH.

The following courses, or their approved transfer equivalents, are required of all candidates for this degree.

| Code | Title | Hours |
|------------------------------------|---|-------|
| Lower Division Requirements | | |
| ITC 101 | Introduction to Information Technology | 3 |
| CSC 121 | Introduction to Computer Science and Programming I | 4 |
| CSC 123 | Introduction to Computer Science and Programming II | 4 |
| ITC 251 | System Programming in C and Unix | 3 |
| CTC 228 | Introduction to Operating Systems and Networks | 4 |
| CSC 255 | Dynamic Web Programming | 3 |
| BIO 120 | Principles of Biology I | 3 |
| BIO 103 | General Biology Laboratory | 1 |
| PHY 100 | Patterns In Nature | 3 |
| MAT 131 | Elementary Statistics and Probability | 3 |

| | | |
|---|---|-----------|
| MAT 281 | Discrete Mathematics | 3 |
| Science- Any Physical or Life Science | | 3 |
| Any Physical Science with Lab and/or any Life Science with lab | | 10 |
| Upper Division Requirements ¹ | | |
| CSC 301 | Computers And Society | 3 |
| ITC 310 | IT Project Management | 3 |
| CSC 311 | Data Structures | 3 |
| CTC 316 | Operating Systems and Networks Support | 3 |
| CTC 362 | Communication Systems Security | 3 |
| CTC 452 | Network Security and Hacking Prevention | 3 |
| ITC 453 | Database Management Systems (DBMS) | 3 |
| ITC 459 | IT Security | 3 |
| ITC 492 | Senior Design | 3 |
| Complete two CSC Elective Courses - Recommended IT Architecture | | 6 |
| Total Hours | | 80 |

¹ A minimum of 18 upper division units in the major must be taken in residence at CSU Dominguez Hills.

4- Year Roadmap

| Course | Title | Hours |
|---|---|-----------|
| First Year | | |
| Fall | | |
| MAT 131 | Elementary Statistics and Probability (GE B4) | 3 |
| HIS 101 | History Of United States (statutory requirement) | 3 |
| ITC 101 | Introduction to Information Technology | 3 |
| GE Area A1 Oral Communication | | 3 |
| GE Area A2 Written Communication | | 3 |
| Hours | | 15 |
| Spring | | |
| CSC 121 | Introduction to Computer Science and Programming I (see academic advisor for GE Area A3 credit) | 4 |
| BIO 102 | General Biology (GE B2) | 3 |
| BIO 103 | General Biology Laboratory (GE B3) | 1 |
| POL 101 | American Institutions (statutory requirements) | 3 |
| GE Area C1 Arts Courses | | 3 |
| Hours | | 14 |
| Second Year | | |
| Fall | | |
| CSC 123 | Introduction to Computer Science and Programming II | 4 |
| CSC 255 | Dynamic Web Programming | 3 |
| CSC 281 | Discrete Structures | 3 |
| GE Area C2 Letters Course | | 3 |
| Hours | | 13 |
| Spring | | |
| ITC 251 | System Programming in C and Unix | 3 |
| CTC 228 | Introduction to Operating Systems and Networks | 4 |
| CSC 311 | Data Structures | 3 |
| GE Area D1 Perspectives on Individuals, Groups, and Society | | 3 |
| PHY 100 | Patterns In Nature (GE B1) | 3 |
| Hours | | 16 |
| Third Year | | |
| Fall | | |
| ENG 350 | Advanced Composition (GWAR satisfying course) | 3 |
| CSC 301 | Computers And Society (GE Area B5) | 3 |
| CTC 316 | Operating Systems and Networks Support | 3 |
| ITC 399 | IT Practicum | 3 |

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|---|---|------------|
| GE Area C1 or C2 | | 3 |
| Hours | | 15 |
| Spring | | |
| ITC 310 | IT Project Management | 3 |
| ITC 453 | Database Management Systems (DBMS) | 3 |
| GE Area D2 Global and Historical Perspectives | | 3 |
| GE Area C3 Integrative Studies in the Humanities | | 3 |
| Additional PHY or Life Science Course | | 3 |
| Hours | | 15 |
| Fourth Year | | |
| Fall | | |
| CTC 362 | Communication Systems Security | 3 |
| CTC 452 | Network Security and Hacking Prevention | 3 |
| ITC 459 | IT Security | 3 |
| GE Area E Lifelong Learning and Self-Development | | 3 |
| GE Area D3 Integrative Studies in the Social Sciences | | 3 |
| Elective to meet 120 units | | 3 |
| Hours | | 18 |
| Spring | | |
| ITC 492 | Senior Design | 3 |
| CSC or ITC Elective Course 1 | | 3 |
| GE Area F Ethnic Studies | | 3 |
| GE Area A3 Logic/Critical Thinking | | 3 |
| CSC or ITC Elective Course 2 | | 3 |
| Hours | | 15 |
| Total Hours | | 121 |

2-Year Roadmap

| Course | Title | Hours |
|---|---|-----------|
| First Year | | |
| Fall | | |
| CSC 301 | Computers And Society (GE B5) | 3 |
| CSC 311 | Data Structures | 3 |
| CTC 316 | Operating Systems and Networks Support | 3 |
| ITC 399 | IT Practicum | 3 |
| Elective to meet 120 units | | 3 |
| Hours | | 15 |
| Spring | | |
| ITC 310 | IT Project Management | 3 |
| ITC 453 | Database Management Systems (DBMS) | 3 |
| ENG 350 | Advanced Composition (GWAR satisfying course) | 3 |
| Elective to meet 120 units | | 3 |
| GE Area C3 Integrative Studies in the Humanities | | 3 |
| Hours | | 15 |
| Second Year | | |
| Fall | | |
| CTC 362 | Communication Systems Security | 3 |
| CTC 452 | Network Security and Hacking Prevention | 3 |
| ITC 459 | IT Security | 3 |
| GE Area D3 Integrative Studies in the Social Sciences | | 3 |
| Elective to meet 120 units | | 3 |
| Hours | | 15 |
| Spring | | |
| ITC 492 | Senior Design | 3 |
| CSC or ITC Upper Division Elective 1 | | 3 |
| CSC or ITC Upper Division Elective 2 | | 3 |
| Elective to meet 120 units | | 3 |
| Elective to meet 120 units | | 3 |
| Hours | | 15 |
| Total Hours | | 60 |