BACHELOR OF SCIENCE IN CYBERSECURITY

Description and Outcomes
This program will equip you to master the foundational goals of cybersecurity. You will apply current technical tools and methodologies to solve security problems. Upon completion, you will be able to evaluate security trends, recognize best practices, and understand IT security products and threats.

You will explore the depth and breadth of materials to enable you to pursue many of the critical certifications recognized by the information assurance community and for Department of Defense (DoD) personnel, as mandated by DoD Directive 8570.1.

The following educational objectives are approved by information technology faculty and the Advisory Board:

- Our graduates will be able to apply current industry-accepted practices and new and emerging practices when solving real-world information technology problems in the industry.
- Our graduates will be able to exhibit teamwork and effective communication skills.
- Our graduates will be able to ethically and appropriately apply knowledge of societal impacts of information technology in the course of career-related activities.

This program is available in ExcelTrack. Speak with your University representative for any limitations. For more information on ExcelTrack, see Learning Paths in the Approach to Learning (https://catalog.purdueglobal.edu/policy-information/university-information/approach-to-learning) section of the Catalog.

Accelerated Master of Science in Information Technology and Master of Science in Cybersecurity Management Options
If you are interested in earning both a bachelor's degree and a master's degree, consider the accelerated options for either the Master of Science in Information Technology or Master of Science in Cybersecurity Management. Refer to the Policies (p. 1) section for details.

Program Length
The Bachelor of Science in Cybersecurity program consists of a minimum of 180 quarter credit hours. The duration of the program depends on transfer credit. Any combination of prior learning credit will not exceed 75 percent of the credits required for the degree. You are responsible for providing the University with an official copy of all transcripts for prior college credit. Refer to the First-Term Responsibilities (https://catalog.purdueglobal.edu/policy-information/admissions/first-term-responsibilities) section for additional information. Upon successful completion of the program, you will be awarded a bachelor of science degree.

Program Outcomes
Discipline-Specific Outcomes
1. Technology Skills: Analyze a complex computing problem to apply principles of computing and other relevant disciplines to identify solutions.
2. System Specifications: Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.
3. Professional Communication: Communicate effectively in a variety of professional contexts.
4. Professional Development: Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles.
5. Team Management: Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline.
6. Security Analysis: Apply security principles and practices to maintain operations in the presence of risks and threats.

General Education Literacies and Professional Competencies
In addition to the discipline-specific outcomes, general education literacies and professional competencies are integrated throughout your academic program. You can review the general education literacies and professional competencies associated with your academic program in the undergraduate School of General Education (https://catalog.purdueglobal.edu/undergraduate/general-education) section of this Catalog.

Program Availability
For program availability, please refer to the U.S. State and Other Approvals (https://catalog.purdueglobal.edu/policy-information/university-information/accreditation-approvals-memberships) section and Program Availability Information (https://www.purdueglobal.edu/catalog-program-availability-info.pdf).

Policies
Progression Requirements
Students may be eligible to transfer into the Bachelor of Science in Information Technology program from the Bachelor of Science in Cybersecurity.

Accelerated Master of Science in Cybersecurity Management Option
If you are enrolled in the University's Bachelor of Science in Cybersecurity program and are interested in continuing on to pursue the University's Master of Science in Cybersecurity Management, you may matriculate into a shortened version of the graduate program.

Upon successful completion of the Bachelor of Science in Cybersecurity program, you may apply for entry to the University's Master of Science in Cybersecurity Management program. If accepted and you meet the requirements for the accelerated Master of Science in Cybersecurity Management option, you may have the following courses waived:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>IT530</td>
<td>Computer Networks</td>
<td>4</td>
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<tr>
<td>IT537</td>
<td>Introduction to Cybersecurity</td>
<td>4</td>
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<tr>
<td>IT541</td>
<td>Computer and Network Security</td>
<td>4</td>
</tr>
<tr>
<td>IT542</td>
<td>Ethical Hacking and Network Defense</td>
<td>4</td>
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</tbody>
</table>
In order to qualify for the accelerated Master of Science in Information Technology option, you must meet the following criteria:

1. Complete your undergraduate coursework in the information technology or cybersecurity program with a minimum cumulative GPA of 3.2.

2. Complete the following courses and obtain a grade of "B" or better in each course (waiver of graduate courses noted above varies based on completion of specific courses listed below):

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
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<tbody>
<tr>
<td>IT234</td>
<td>Database Concepts</td>
<td>5</td>
</tr>
<tr>
<td>IT262</td>
<td>Certified Ethical Hacking I</td>
<td>5</td>
</tr>
<tr>
<td>IT278</td>
<td>Network Administration</td>
<td>5</td>
</tr>
<tr>
<td>IT283</td>
<td>Networking with TCP/IP</td>
<td>5</td>
</tr>
<tr>
<td>IT286</td>
<td>Network Security Concepts</td>
<td>5</td>
</tr>
<tr>
<td>IT301</td>
<td>Project Management I</td>
<td>6</td>
</tr>
<tr>
<td>IT316</td>
<td>Computer Forensics</td>
<td>6</td>
</tr>
<tr>
<td>IT350</td>
<td>Advanced Database Concepts</td>
<td>6</td>
</tr>
<tr>
<td>IT375</td>
<td>Windows Enterprise Administration</td>
<td>6</td>
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<tr>
<td>IT395</td>
<td>Certified Ethical Hacking II</td>
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</tr>
<tr>
<td>IT401</td>
<td>Project Management II</td>
<td>6</td>
</tr>
<tr>
<td>IT411</td>
<td>Digital Forensics</td>
<td>6</td>
</tr>
<tr>
<td>IT412</td>
<td>Information Systems Security</td>
<td>6</td>
</tr>
<tr>
<td>IT460</td>
<td>Systems Analysis and Design</td>
<td>6</td>
</tr>
<tr>
<td>IT484</td>
<td>Cybersecurity Policies</td>
<td>6</td>
</tr>
</tbody>
</table>

**Accelerated Master of Science in Information Technology Option**

If you are enrolled in the University’s Bachelor of Science in Information Technology program and are interested in continuing on to pursue the University’s Master of Science in Information Technology, you may matriculate into a shortened version of the graduate program.

Upon successful completion of the Bachelor of Science in Information Technology program, you may apply for entry to the University’s Master of Science in Information Technology program. If accepted and you meet the requirements for the accelerated Master of Science in Information Technology option, you may have the following courses waived:

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<tbody>
<tr>
<td>IT510</td>
<td>System Analysis and Design</td>
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</tr>
<tr>
<td>IT511</td>
<td>Information Systems Project Management</td>
<td>4</td>
</tr>
<tr>
<td>IT526</td>
<td>SQL Query Design</td>
<td>4</td>
</tr>
<tr>
<td>IT530</td>
<td>Computer Networks</td>
<td>4</td>
</tr>
<tr>
<td>IT541</td>
<td>Computer and Network Security</td>
<td>4</td>
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<tr>
<td>IT542</td>
<td>Ethical Hacking and Network Defense</td>
<td>4</td>
</tr>
<tr>
<td>IT550</td>
<td>Computer Forensics and Investigations</td>
<td>4</td>
</tr>
</tbody>
</table>

In order to qualify for the accelerated Master of Science in Information Technology option, you must meet the following criteria:

1. Complete your undergraduate coursework in the information technology or cybersecurity program with a minimum cumulative GPA of 3.2.

2. Complete the following courses and obtain a grade of "B" or better in each course (waiver of graduate courses noted above varies based on completion of specific courses listed below):

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<tr>
<td>IT283</td>
<td>Networking with TCP/IP</td>
<td>5</td>
</tr>
<tr>
<td>IT286</td>
<td>Network Security Concepts</td>
<td>5</td>
</tr>
<tr>
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</tr>
<tr>
<td>IT412</td>
<td>Information Systems Security</td>
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<tr>
<td>IT460</td>
<td>Systems Analysis and Design</td>
<td>6</td>
</tr>
<tr>
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<td>Cybersecurity Policies</td>
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</tr>
</tbody>
</table>

**Certification, State Board, and National Board Exams**

Certain state certification and licensure boards have specific educational requirements for programs to lead to a license or nongovernmental certification that is a precondition for employment in a recognized occupation.

Unless otherwise specified, Purdue Global’s programs are not designed to meet any specific state’s licensure or certification requirements. If certain licensed occupations, vocations, or professions are not explicitly listed, Purdue Global has not made a determination with respect to the licensure or certification requirements of those occupations, vocations, or professions. Licensure-track programs may limit enrollment to students in certain states; please see Purdue Global’s Program Availability Information (https://www.purdueglobal.edu/catalog-program-availability-info.pdf) to determine enrollment eligibility.

You are responsible for understanding the requirements of optional certification exams. Such requirements may change during the course of your program. You are not automatically certified in any way upon program completion. Although certain programs are designed to prepare you to take various optional certification exams, Purdue Global cannot guarantee you will be eligible to take these exams or become certified. Your eligibility may depend on your work experience, completion of education and/or degree requirements, not having a criminal record, meeting other certification requirements, or the program or the University itself having appropriate accreditation or licensure.

**Degree Plan**

The icon appears in the title of traditional courses that are also available as a set of module courses. Module course availability may be limited to certain academic calendars. See Course Types (https://catalog.purdueglobal.edu/policy-information/university-information/ approach-to-learning) for information about module courses.
# Program Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td><strong>Core Requirements</strong></td>
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<tr>
<td>CM107</td>
<td>College Composition I</td>
<td>5</td>
</tr>
<tr>
<td>CM220</td>
<td>College Composition II</td>
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</tr>
<tr>
<td>CS204</td>
<td>Professionalism - Theory and Practice in the Global Workplace</td>
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<tr>
<td>MM212</td>
<td>College Algebra</td>
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<tr>
<td><strong>Arts and Humanities (select one of the following):</strong></td>
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<tr>
<td>HU200</td>
<td>Arts and Humanities - Modern Creative Expressions</td>
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<tr>
<td>HU245</td>
<td>Ethics</td>
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<tr>
<td>HU250</td>
<td>Humanities and Culture</td>
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<tr>
<td><strong>Science (select one of the following):</strong></td>
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<tr>
<td>SC200</td>
<td>Discovering Science - Current Issues in a Changing World</td>
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<tr>
<td>SC235</td>
<td>General Biology I - Human Perspectives</td>
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<tr>
<td>SC246</td>
<td>Fundamentals of Microbiology</td>
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<tr>
<td>SC250</td>
<td>Fundamentals of Science</td>
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<tr>
<td><strong>Social Science (select one of the following):</strong></td>
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<tr>
<td>SS211</td>
<td>The 1960s - Reshaping the American Dream</td>
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<tr>
<td>SS236</td>
<td>People, Power, and Politics - An Introduction to American Government</td>
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<tr>
<td>SS250</td>
<td>The Technological Revolution - A Social Scientific Approach</td>
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<tr>
<td><strong>Total Core Requirements</strong></td>
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<tr>
<td><strong>Major Requirements</strong></td>
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<tr>
<td>CM241</td>
<td>Foundations of Technical Communication</td>
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<tr>
<td>IT104</td>
<td>Introduction to Cybersecurity</td>
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<tr>
<td>IT244</td>
<td>Python Programming</td>
<td>3</td>
</tr>
<tr>
<td>IT262</td>
<td>Certified Ethical Hacking I</td>
<td>5</td>
</tr>
<tr>
<td>IT273</td>
<td>Networking Concepts</td>
<td>5</td>
</tr>
<tr>
<td>IT275</td>
<td>Linux System Administration</td>
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<tr>
<td>IT277</td>
<td>Certified Information Systems Security Professional I</td>
<td>5</td>
</tr>
<tr>
<td>IT279</td>
<td>Certified Information Systems Security Professional II</td>
<td>5</td>
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<tr>
<td>IT283</td>
<td>Networking with TCP/IP</td>
<td>5</td>
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<td>IT286</td>
<td>Network Security Concepts</td>
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<tr>
<td>MM207</td>
<td>Statistics</td>
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<td>MM250</td>
<td>Discrete Mathematics</td>
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<td>MT140</td>
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<td>IT316</td>
<td>Computer Forensics</td>
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<tr>
<td>IT331</td>
<td>Technology Infrastructure</td>
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<td>IT374</td>
<td>Linux Security</td>
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<tr>
<td>IT388</td>
<td>Routing and Switching I</td>
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<tr>
<td>IT390</td>
<td>Intrusion Detection and Incident Response</td>
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<td>IT395</td>
<td>Certified Ethical Hacking II</td>
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<tr>
<td>IT400</td>
<td>Ethics in Cybersecurity</td>
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<tr>
<td>IT410</td>
<td>Certified Information Systems Security Professional III</td>
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<tr>
<td>IT411</td>
<td>Digital Forensics</td>
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<td>IT412</td>
<td>Information Systems Security</td>
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<td>IT484</td>
<td>Cybersecurity Policies</td>
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<tr>
<td>IT479</td>
<td>Bachelor’s-Level Cybersecurity Internship</td>
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<tr>
<td>or IT497</td>
<td>Bachelor’s Capstone in Cybersecurity</td>
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<td><strong>Total Major Requirements</strong></td>
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<td><strong>TOTAL CREDITS</strong></td>
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