BACHELOR OF SCIENCE IN CLOUD COMPUTING AND SOLUTIONS

Description and Outcomes
This program equips you to master the foundational goals of cloud computing. You will apply current technical tools and methodologies to create cloud solutions. Upon completion, you will be able to evaluate cloud computing trends, recognize best practices, and analyze and evaluate cloud providers and cloud solutions. The courses in this program enable you to pursue many critical cloud certifications. Whether your immediate educational goals are satisfied by the completion of a bachelor’s degree or you are planning to pursue study in the information technology field beyond the baccalaureate level, this degree program may be for you.

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.

Program Availability
The Bachelor of Science in Cloud Computing and Solutions program consists of a minimum of 180 quarter credit hours. Upon successful completion of the program, you will be awarded a bachelor of science degree.

Accelerated Master's Degree 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 Progression Requirements (https://catalog.purdueglobal.edu/undergraduate/business-information-technology/) for details.

Program Outcomes

5. Cloud Analysis: Evaluate the potential impact of cloud-based information systems and technology on business processes.
6. Project Management: Apply project management practices, tools, and methods to cloud solutions.
7. Professional Development: Recognize the ethical considerations for IT professionals locally and globally as they develop in their careers.

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 General Education and Professional Competency Requirements (https://catalog.purdueglobal.edu/undergraduate/general-education-professional-competency-requirements/) section of this Catalog.

Policies
Please refer to school-specific policies (https://catalog.purdueglobal.edu/policy-information/university-information/education-approach-to-learning/) and the Policy Information (https://catalog.purdueglobal.edu/policy-information/) section for general Purdue Global policies.

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 reviewed the licensure or certification requirements of those occupations, vocations, or professions, nor intended the program to meet such requirements. 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/](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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<tbody>
<tr>
<td></td>
<td><strong>Core Requirements</strong></td>
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<tr>
<td>CM107</td>
<td>College Composition I</td>
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<tr>
<td>CM220</td>
<td>College Composition II</td>
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<td>CS212</td>
<td>Communicating Professionalism</td>
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<td>MM212</td>
<td>College Algebra</td>
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<td>MM250</td>
<td>Discrete Mathematics</td>
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<td>Arts and Humanities Requirement ¹</td>
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<td>100/200 Level</td>
<td>Science Requirement ¹</td>
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<tr>
<td>100/200 Level</td>
<td>Social Science Requirement ¹</td>
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<td>100/200 Level</td>
<td>General Education Elective</td>
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<td>Total Core Requirements</td>
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<td><strong>Major Requirements</strong></td>
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<td>IT104</td>
<td>Introduction to Cybersecurity</td>
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<tr>
<td>IN205</td>
<td>Routing and Switching I</td>
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<tr>
<td>IT213</td>
<td>Software Development Concepts</td>
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<td>IT222</td>
<td>Introduction to Cloud Computing</td>
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<td>IT227</td>
<td>Cloud Infrastructure Administration</td>
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<tr>
<td>IT234</td>
<td>Database Concepts</td>
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<td>IT273</td>
<td>Networking Concepts</td>
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<td>IT275</td>
<td>Linux System Administration</td>
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<td>IT278</td>
<td>Windows Administration</td>
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<td>IT286</td>
<td>Network Security Concepts</td>
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<td>IT303</td>
<td>Virtualization and Cloud Security</td>
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<td>IT304</td>
<td>Application Development and Scripting in the Cloud</td>
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<td>IT306</td>
<td>Cloud Services Management</td>
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<td>IT374</td>
<td>Linux Security</td>
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<td>Windows Enterprise Administration</td>
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<td>IT403</td>
<td>Advanced Cloud Security</td>
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<td>IT404</td>
<td>Security Testing for Cloud Applications</td>
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<td>IT413</td>
<td>Migrating Data and Applications to the Cloud</td>
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<td>IT414</td>
<td>Software Development Operations in Cloud Environments</td>
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<td>IT460</td>
<td>Systems Analysis and Design</td>
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<td>IT469</td>
<td>Bachelor’s-Level Cloud Computing and Solutions Internship</td>
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<td>or IT473</td>
<td>Bachelor’s Capstone in Cloud Computing and Solutions</td>
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| Open Elective | 19 |
| Total Open Elective Requirements | 19 |

**TOTAL CREDITS**  

1 For options to fulfill this requirement, see the corresponding literacy in General Education and Professional Competency Requirements ([https://catalog.purdueglobal.edu/undergraduate/general-education-professional-competency-requirements/](https://catalog.purdueglobal.edu/undergraduate/general-education-professional-competency-requirements/)).