

# 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.

## Graduate Program Pathways

If you are interested in earning both a bachelor's and master's degree, consider a graduate program pathway (<https://catalog.purdueglobal.edu/undergraduate/graduate-program-pathways/>).

## Program Length

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.

## Program Outcomes

### Discipline-Specific Outcomes

1. Technology Skills: Apply current technical tools and methodologies to create cloud solutions.
2. Client Specifications: Analyze users' cloud requirements.
3. System Specifications: Design secure cloud information systems.
4. Technology Analysis: Evaluate cloud computing trends, practices, and products.
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.

## 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

Please refer to school-specific policies (<https://catalog.purdueglobal.edu/undergraduate/business-information-technology/>) and the Policy Information (<https://catalog.purdueglobal.edu/policy-information/>) section for general Purdue Global policies.


## Certification, State Board, and National Board Exams

Certification and licensure boards have state-specific educational requirements for programs that lead to a license or certification that is a precondition for employment. Prospective and current students must review Purdue Global's State Licensure and Certifications (<https://www.purdueglobal.edu/about/accreditation/licensure-state-authorizations/>) site to view program and state-specific licensure information.
























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, and meeting other certification requirements.

## 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

Code	Title	Credits
<b>Core Requirements</b>		
CM107	 College Composition I	5
CM220	 College Composition II	5
CS212	 Communicating Professionalism	5
MM212	 College Algebra	5
MM250	 Discrete Mathematics	5
100/200 Level	Arts and Humanities Requirement <sup>1</sup>	5
100/200 Level	Science Requirement <sup>1</sup>	5
100/200 Level	Social Science Requirement <sup>1</sup>	5
100/200 Level	General Education Elective	5
Total Core Requirements		45
<b>Major Requirements</b>		
IT222	 Introduction to Cloud Computing	5
IT227	 Cloud Infrastructure Administration	5
IT234	 Database Concepts	5
Select one of the following:		5
IN250	 Software Development Concepts Using Python	5
IN251	 Software Development Concepts Using C#	
IN252	 Software Development Concepts Using Java	
IN253	 Software Development Concepts Using JavaScript and PHP	
IT273	 Networking Concepts	5
IT278	 Windows Administration	5
IT286	 Network Security Concepts	5
IT303	 Cloud Architecture Concepts and Design	6
IT304	 Application Development and Scripting in the Cloud	6
IT306	 Cloud Services Management	6
IT403	 Cloud Security	6
IT404	 Advanced Cloud Security	6
IT413	 Migrating Data and Applications to the Cloud	6
IT414	 Software Development Operations in Cloud Environments	6
IT460	 Systems Analysis and Design	6
IT473	Bachelor's Capstone in Cloud Computing and Solutions	6
Total Major Requirements		89
<b>Open Elective Requirements</b>		

Open Elective	46
Total Open Elective Requirements	46
<b>TOTAL CREDITS</b>	<b>180</b>

<sup>1</sup> 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/>).