

CERTIFICATE IN ADVANCED SOFTWARE DEVELOPMENT

Certificate programs offer working professionals an opportunity to increase their knowledge and skills in the specific areas of information technology. A certificate representing proven academic performance is presented after the required coursework is completed with a GPA of 3.0/4.0. All 500-level courses may be later applied toward the Master of Information Technology and Management, Master of Cyber Forensics and Security, or Master of Science in Applied Cybersecurity and Digital Forensics for those who apply and are accepted to the degree program. Applicants should have a bachelor's degree from an accredited college or university; the degree need not be in an information technology or a computer-related field. Prerequisites may be required for some courses in certificates; these prerequisites will not be applied to the certificate.

This program is designed for students seeking knowledge that will enhance their skills as a software developer.

The prerequisite path for this certificate is completion of coursework, training, or certification equivalent to ITM 311 (Beginning Java) and ITMD 510 (Intermediate Java.) Equivalent certification may be Oracle Certified Associate (OCA) Java Programmer + two years industry experience or Oracle Certified Professional (OCP) Java Programmer.

Curriculum

Code	Title	Credit Hours
Required Courses		(12)
ITMD 515	Advanced Software Programming	3
ITMM 571	Project Management for Information Technology Management ¹	3
Select a minimum of two courses from the following:		6
ITMD 511	Application Development Methodologies	3
ITMD 513	Open Source Programming	3
ITMD 519	Topics in Software Development	1-6
ITMD 532	UML-Based Software Development	3
ITMD 534	Human and Computer Interaction	3
ITMD 536	Software Testing and Maintenance	3
ITMO 556	Introduction to Open Source Software	3
ITMS 518	Coding Security	3
Total Credit Hours		12

¹ Students who have already completed coursework, training, or certification equivalent to ITMM 571 may substitute a fourth course from the above list.