

# IT 489 Final Project Guidelines and Rubric

### **Overview**

The final project for this course is the creation of an internet-based professional portfolio.

Throughout your program experience you will maintain an electronic portfolio to demonstrate technological, professional, interpersonal, and leadership growth and competencies. You may add or remove items you perceive are representative of your most substantial demonstration of growth and achievements as you proceed through your coursework.

The portfolio is a collection of materials that indicates your progress toward mastery of program outcomes throughout the program experience. The end product will be a professional portfolio of artifacts to showcase the knowledge, skills, dispositions, and abilities gained through your undergraduate career. A professional portfolio is an authentic way to demonstrate competency for future employers, and it serves as evidence of the claims made in your professional statement and résumé.

This course represents the integration of previous coursework and practical experience with a focus on an authentic demonstration of the competencies outlined by the program. You will present a professional portfolio containing a collection of performance-based artifacts combined with metacognitive reflection and a professional statement of purpose that reflects your ability to make globally, socially, and ethically responsible information technology and systems decisions that are in line with legal and organizational policy requirements. This course is structured around this final project so that you have the appropriate support and resources required to be successful.

The project is divided into **three milestones**, which will be submitted at various points throughout the course to scaffold learning and ensure quality final submissions. These milestones will be submitted in **Modules Two, Four, and Five. The final submission will occur in Module Seven.** 

In this assignment, you will demonstrate your mastery of the following program/course outcomes:

- Analyze a complex computing problem and apply principles of computing and other relevant disciplines to identify solutions
- Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline
- Communicate effectively in a variety of professional contexts
- Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles
- Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline
- Identify and analyze user needs and to take them into account in the selection, creation, integration, evaluation, and administration of computing based systems

# Prompt

You will submit an internet-based professional portfolio that includes:



- I. Artifacts: Select artifacts/exemplars that demonstrate your proficiency with the knowledge, skills, abilities, or dispositions described in each program/course outcome. These artifacts can come from the courses in this program, work experience, recreations of tasks in other situations, and other experiences that you feel demonstrate your ability to meet the outcomes.
- II. Reflections
  - a) Briefly describe each artifact you have chosen. What is the item? When was it created? What was the original purpose of the item?
  - b) Justify how the artifact demonstrates that you have met the outcome. What knowledge, skills, dispositions, or abilities did you need to demonstrate competency in when creating this artifact? Why did you select this item? What specific components of the artifact showcase the skills you are referring to?
  - c) What did you learn as you were creating the artifact? What challenges were you faced with when using these skills? Would you do anything differently if you were asked to recreate this artifact? How did this item set you up for success in the real world?
- III. Professional Statement: Articulate the skills from the outcomes and reflection into a professional statement. This statement should be formed as the advertisement for potential employers that gives them specific reasons to hire you. What skills do you have? Where will these skills be showcased in your résumé? How will these skills add to your overall qualifications and/or technical skills?

Your work is expected to meet the highest professional standards. Remember, you are selling yourself as much as you are selling your ideas.



Outcome	Possible Artifacts and Course Completed		
IT-489-01: Analyze a complex computing problem and	Computer Program IT-145		
apply principles of computing and other relevant	Company Consult Debrief IT-200		
disciplines to identify solutions	Written Report and Team Presentation IT-315		
	Database and Project Design Document IT-330		
	Networking Report IT-340		
	Risk Assessment and Mitigation Strategy IT-380		
	Systems Analysis IT-415		
	Systems Development Project IT-420		
IT-489-02: Design, implement, and evaluate a computing-	Computer Program IT-145		
based solution to meet a given set of computing	Company Consult Debrief IT-200		
requirements in the context of the program's discipline	Database Design Report Package IT-235		
	Written Report and Team Presentation IT-315		
	Database and Project Design Document IT-330		
	Company Consult Debrief IT-331		
	Networking Report IT-340		
	Risk Assessment and Mitigation Strategy IT-380		
	Systems Analysis IT-415		
	Systems Development Project IT-420		
IT-489-03: Communicate effectively in a variety of	Database Design Report Package IT-235		
professional contexts	Written Report and Presentation IT-315		
	Company Consult Debrief IT-331		
	Project Management Plan and Self-Evaluation IT-328		
	Risk Assessment and Mitigation Strategy IT-380		
	Training Manual IT-385		
	Systems Analysis IT-415		
	Systems Development Project IT-420		
IT-489-04: Recognize professional responsibilities and	Company Consult Debrief IT-331		
make informed judgments in computing practice based on	Networking Report IT-340		
legal and ethical principles	Risk Assessment and Mitigation Strategy IT-380		
	Training Manual IT-385		
	Risk Analysis Paper and Mitigation Plan Presentation IT-		
	412		
	Systems Analysis IT-415		
	Systems Development Project IT-420		



IT-489-05: Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline	Company Consult Debrief IT-200 Written Report and Team Presentation IT-315 Risk Assessment and Mitigation Strategy IT-380 Risk Analysis Paper and Mitigation Plan Presentation IT- 412 Systems Analysis IT-415 Systems Development Project IT-420
IT-489-06: Identify and analyze user needs and to take them into account in the selection, creation, integration, evaluation, and administration of computing based systems	Company Consult Debrief IT-200 Written Report and Team Presentation IT-315 Project Management Plan and Self-Evaluation IT-328 Database Design Report Package IT-235 Database and Project Design Document IT-330 Company Consult Debrief IT-331 Networking Report IT-340 Risk Assessment and Mitigation Strategy IT-380 Training Manual IT-385 Risk Analysis Paper and Mitigation Plan Presentation IT- 412 Systems Analysis IT-415 Systems Development Project IT-420

### Milestones

#### Milestone One: Professional Statement of Purpose

In **Module Two**, you will submit a professional statement of purpose. The professional statement of purpose will articulate the skills from the program/course outcomes and a reflection of your personal goals and experience. **This milestone will be graded with the Milestone One Rubric.** 

#### Milestone Two: Artifact Reflections Part One

In **Module Four**, you will submit Artifact Reflections Part One. For this milestone, you will write a reflection for each artifact that aligns with the first three program/course outcomes. **This milestone will be graded with the Milestone Two Rubric.** 

#### Milestone Three: Artifact Reflections Part Two

In **Module Five**, you will submit Artifact Reflections Part Two. For this milestone, you will write a reflection for each artifact that aligns with the last three program/course outcomes. **This milestone will be graded with the Milestone Three Rubric.** 



#### Final Submission: The Professional E-Portfolio

In **Module Seven**, you will submit your final project, the professional e-portfolio. It should be a complete, polished artifact containing **all** of the critical elements of the final product. It should reflect the incorporation of feedback gained throughout the course. **The final submission will be graded using the Final Project Rubric.** 



### Deliverables

Milestone	Deliverables	Module Due	Grading	
1	Professional Statement of Purpose	tement of Purpose Two Graded separately; Milestone One Guidelines and Rubi		
2	Artifact Reflections Part One	Four	Graded separately; Milestone Two Guidelines and Rubric	
3	Artifact Reflections Part Two	Five	Graded separately; Milestone Three Guidelines and Rubric	
	Final Submission: The Professional E- Portfolio	Seven	Graded separately; Final Project Rubric	

## **Final Project Rubric**

#### Guidelines for Submission: Professional Statement, Artifacts, Validation of Each Artifact

This rubric will be applied to the portfolio as a whole. The "Possible Indicators of Success" are examples for you and the instructor of the types of concepts to look for to demonstrate proficiency. They are neither exhaustive nor prescriptive and should be used as guides for illustrating how your capstone embodies the outcome. All outcomes are weighted equally.

BS-IT-CORE-01: Analyze a complex computing problem and apply principles of computing and other relevant disciplines	Proficient	Not Proficient		
to identify solutions	100%	0%		
Possible Indicators of Success				
Does the portfolio demonstrate the student's ability to follow specifications and apply best principles and practices in the analysis of a computing problem?				
Does the portfolio demonstrate the student's ability to consider the human element in terms of human/computer interaction and security of an organization?				
Does it demonstrate the student's ability to ensure data and information security, human security, and physical security of an organization?				
Does the portfolio demonstrate the student's ability to leverage appropriate technologies? Does it employ multiple appropriate communication technologies				
to advance objectives? Does it demonstrate the student's ability to make recommendations for effective designs and solutions?				
BS-IT-CORE-02: Design, implement, and evaluate a computing-based solution to meet a given set of computing	Proficient	Not Proficient		
requirements in the context of the program's discipline	100%	0%		
Possible Indicators of Success				
Does the portfolio demonstrate the student's ability to make judicious recommendations for core technologies and systems? Does the portfolio demonstrate				
the student's data manipulation methods and computational thinking skills?				
Does the portfolio demonstrate how the student recommends solutions to support organizational strategies within a busines	ss environment	?		
Does the portfolio demonstrate the student's ability to apply contemporary tools and technology for research development	toward recomm	ending solutions		
in a business environment?				



BS-IT-CORE-03: Communicate effectively in a variety of professional contexts	Proficient 100%	Not Proficient 0%
Possible Indicators of Success		
Does the portfolio demonstrate the student's ability to select and employ appropriate oral and written communication skill	s through multip	le strategies?
Does it demonstrate the student's ability to adapt oral, print, and multimedia tools and methods to meet the needs of diver	se audiences?	
Does the portfolio demonstrate the student's sensitivity to various audiences, especially in the way work is approached and	interpreted? Do	oes it target the
appropriate audience(s) and align the response/content accurately?		
Does the portfolio demonstrate the student's clear and insightful understanding of him/herself in the global community and	d among the div	erse stakeholders
involved in the project? Does it demonstrate the student's ability to effectively communicate using the correct approach, no	menclature, an	d presence for
different audiences?		
Does the portfolio demonstrate the student's ability to employ critical soft-skills? Does it demonstrate the student's ability	o communicate	technological
solutions using effective oral and written, problem solving, and ethical and critical thinking skills? Does it justify how the stu	dent demonstra	ted the use of
critical soft-skills to solve a technology-related problem?		
Does the portfolio demonstrate the student's ability to use the most appropriate delivery medium and visualization for the	intended messa	ge delivery?
Does the portfolio demonstrate student's ability to create appropriate technical communications?		
BS-IT-CORE-04: Recognize professional responsibilities and make informed judgments in computing practice based on	Proficient	Not Proficient
legal and ethical principles	100%	0%
Possible Indicators of Success		
Does the portfolio demonstrate the student's creative, versatile problem solving, and critical thinking skills?		
Does the portfolio demonstrate the student's professionalism? Does it demonstrate the student's ability to reflect on the w	ork that has bee	n done and
indicate both the positive aspect(s) and the opportunities for improvement in future experiences?		
Does the portfolio demonstrate the student's ability to protect information and maintain information security? Does it dem	onstrate the eth	ics and
global/social awareness necessary for creating technology solutions? Does it demonstrate the student's ability to justify the	decisions made	in deriving a
solution?		
Does the portfolio demonstrate the student's ability to consider the audience, geographic locations, and tools and technolo	gies in policyma	king? Does it
demonstrate forethought in planning for and addressing cultural and social issues that might come into play in a technologi	cal solution?	
Does the portfolio demonstrate the student's open-mindedness and global awareness? Does it avoid the inclusion of person	nal bias in decisi	on making? Does
the portfolio demonstrate the student's ability to problem solve and communicate using socially responsible means?		
Does the portfolio demonstrate the student's ability to make informed technology and systems-related decisions? Does it c	onform to accep	ted ethical
standards? Does it adhere to all legal and organizational policy requirements?		
Does the portfolio demonstrate the student's ability to analyze business practices and develop reasonable, effective solutio	ns?	
Does the portfolio demonstrate the student's ability to ensure security of data and information, technologies, and humans		n?
BS-IT-CORE-05: Function effectively as a member or leader of a team engaged in activities appropriate to the program's	Proficient	Not Proficient
bs-ri-coke-os. Function enectively as a member of leader of a team engaged in activities appropriate to the program's		
discipline	100%	0%



Does the portfolio demonstrate the student's adaptability? Does it show an adherence to time expectations? Does it demonstrate the student's ability to problem-solve independently and promote success?

Does the portfolio demonstrate the student's knowledge base? Does it employ specific, industry-appropriate terminology when describing and applying strategies and tactics?

Does the portfolio demonstrate the student's ability to employ contemporary and creative strategies and tactics that position him or her to promote success in a high-functioning organization? Does it demonstrate the student's ability to utilize interpersonal skills in promoting success?

Does the portfolio demonstrate the student's ability to communicate ideas, solutions, problems, and conflict resolution strategies? Does it demonstrate the student's ability to collaborate and problem solve?

Does the portfolio demonstrate the student's ability to make alignments between information technology solutions and business strategies? Does it demonstrate the student's project management and planning capabilities?

BS-IT-CORE-06: Identify and analyze user needs and to take them into account in the selection, creation, integration,ProficientNot Proficientevaluation, and administration of computing based systems100%0%

Possible Indicators of Success

Does the portfolio demonstrate the student's ability to evaluate system design and maintenance solutions for recommending effective tools and applications? Does it demonstrate the student's ability to meet end user and organizational needs for system design and maintenance?

Does the portfolio demonstrate the student's ability to suggest effective upgrades to systems, and suggestions for how systems will be maintained? Does it demonstrate the student's ability to recommend "effective" solutions for optimization, innovative technologies, staying within budget, and ensuring alignment with stakeholder needs?

Does the portfolio demonstrate the student's ability to analyze and solve technology-related problems using the software development life cycle? Does it demonstrate the student's ability to write a computer program? Does it demonstrate the student's ability to map back performances to demonstrate competence?

Does the portfolio demonstrate the student's ability to select and use appropriate IT tools to solve problems or recommend change? Does it demonstrate the student's ability to develop a program using object-oriented software tools? Does the portfolio demonstrate the student's ability to justify the selection and use of technological tools?