

UMBC UGC Change in Existing Course: CMSC487 – Introduction To Network Security

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Proposed Effective Date: 1/21/2021

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COURSE INFORMATION: (please provide all information in the “current” column, and only the information changing in the “proposed” column)

change		current	proposed
<input type="checkbox"/>	Course Number(s)	CMSC 487	
<input type="checkbox"/>	Formal Title	Introduction To Network Security	
<input type="checkbox"/>	Transcript Title (≤30c)		
<input type="checkbox"/>	Recommended Course Preparation		
<input checked="" type="checkbox"/>	Prerequisite NOTE: Unless otherwise indicated, a prerequisite is assumed to be passed with a “D” or better.	CMSC 421 and CMSC 481 with a C or better.	CMSC 421 or CMSC 481 with a C or better.
<input type="checkbox"/>	# of Credits Must adhere to the UMBC Credit Hour Policy	3	
<input type="checkbox"/>	Repeatable?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/>	Max. Total Credits	3	Max. Total Credits: This should be equal to the number of credits for courses that cannot be repeated for credit. For courses that may be repeated for credit, enter the maximum total number of credits a student can receive from this course. E.g., enter 6 credits for a 3 credit course that may be taken a second time for credit, but not for a third time. Please note that this does NOT refer to how many times a class may be retaken for a higher grade.
<input type="checkbox"/>	Grading Method(s)	<input type="checkbox"/> Reg (A-F) <input type="checkbox"/> Audit <input type="checkbox"/> Pass-Fail	<input type="checkbox"/> Reg (A-F) <input type="checkbox"/> Audit <input type="checkbox"/> Pass-Fail

CURRENT CATALOG DESCRIPTION:

The objective of this course is to teach the fundamental concepts, architectures, and protocols related to network security. Topics covered include: Overview of network security; Basics of cryptography; Threat models; Authentication and Authorization Mechanisms and Standards; Public Key Infrastructure; Electronic Mail Security; Network Layer Security; Transport layer and web security; Packet filtering; Firewalls; Intrusion Detection, and Virtual Private Networks; Recent topics in Network Security.

PROPOSED CATALOG DESCRIPTION (Approximately 75 words in length. Please use full sentences): leave blank if no changes are being proposed to the catalog description. NOTE: information about prerequisites should NOT appear in the catalog description.)

RATIONALE FOR CHANGE:

Students who have completed CMSC 421 or CMSC 481 have enough background to be successful in CMSC 487. Additionally, we want more students in the cybersecurity track to be able to take this course as an elective earlier in the program but with both CMSC 421 and CMSC 481 as prerequisites this is often not possible until their second semester senior year.