FITCHBURG STATE UNIVERSITY

Academic Year* 2021-2022 SOGCE #:* 07

Graduate Program Change Proposal

Department/Committee Information

The main contact person for the Graduate Curriculum Committee should fill out this form.

Requestor Name: * Xuzhou Chen

Members of the Graduate Curriculum Committee: Natasha Kourtonia, Ricky Sethi, Kevin Austin, Robin Chataut, Nadimpalli Mahadev

Department / Unit Developing: * Computer Science

Chair of Department for Policy: * Chen

Chair Email: * xchen@fitchburgstate.edu

Academic Dean of Department or Program for the Policy: * Margaret Hoey

Academic Dean E-mail: * <Dr. Hoey> mhoey@fitchburg

Program Information

This proposal refers to a (check all that apply): ☐ Certificate Program ☐ Teacher Licensure Program ☐ Degree Program

Does the program run on a cohort model?
- ○ Yes
- ◉ No

Will additional faculty be needed, day/adjunct?
- ○ Yes
- ◉ No

Briefly describe program change to the existing program as it will appear in university catalog:

* In the current program, students are required to take 6 required core courses and 5 graduate electives with the total of 33 credit hours to graduate. Student are allowed to take up to 3 credit hours of internship to count towards the program of study.

The following are the changes to the existing program:
1. Students are allowed to take up to additional 3 credit hours of internship upon the approval of the departmental graduate advisor after they complete 3 credit hours of internship.
2. If the additional credit hours of internship is approved, students should take a total of 33 plus the credits approved for the additional internship. The total credits should not exceed 36 credits.

The change should also apply to the MS computer science program with Data Science Concentration.

Population/anticipated enrollment/staffing plan (i.e., Who/how many will program serve?)

* N/A

Rationale and expected outcomes for program change:

* Many students receive internship offers and often times these internships will start during the summer semesters and continue in the fall semester. The 3 credit hour limit will prevent them from taking full-time internships in both summer and fall.

In particular, for the students in Data Science concentration, they are also required to take additional Data Science required courses besides the 6 required core courses, making the total required courses to 10. This will leave them only one elective course. So for Data Science students, we also want to increase the total credits for the program to up 36 to prevent the substitute of a required course with the additional internship credits.

Implementation plan (what semester will new policy/policy change begin; will change be phased in)

* We hope to implement the change as early as Spring 2022.

An old and new plan of study must be included with this proposal (Please use template for program revision).

If new courses are proposed or major changes are made to existing courses, submit a Graduate Council New Course Approval form.

Old Plan of Study Attached here.

New Plan of Study Attached here

Attach any letter(s) of support from professional agencies or others within or outside the university.

Signatures

* ...3237343036

Xuzhou Chen — 09/19/2021

Requester Signature: Date

10/08/2021

* ...3232353430 Date

Xuzhou Chen
Department Chair Approval:

* ...3735363037

Margaret Hoey 10/16/2021
Academic Dean Signature: Date

* ...3233363434

Becky Copper Glenz 10/27/2021
SGOCE Dean Signature: Date

Approval of the Graduate Council Date

Approval of the President Date

Notification

Reviewed by the Registrar: _____

Reviewed by the Library: _____

SGOCE Admin. Assistant Signature: Electronically signed by Diane Fors on 10/13/2021 2:41:08 PM

Name of Concentration, Program:

Computer Science, MS

Old Plan of Study			**New Plan of Study**		
Required Courses **Course number: Title of Course**	Pre-practicum Hours	Credits	**Required Courses** **Course number: Title of Course**	Pre-practicum Hours	Credits
CSC 7050 - Theory of Computation		3	CSC 7050 - Theory of Computation		3
CSC 7400 - Object Oriented Analysis and Design		3	CSC 7400 - Object Oriented Analysis and Design		3
CSC 8050 - Design and Analysis of Algorithms		3	CSC 8050 - Design and Analysis of Algorithms		3
CSC 7013 - Advanced Mathematics for Computer Scientists		3	CSC 7013 - Advanced Mathematics for Computer Scientists		3
CSC 7014 - The Practice of Computer Programming		3	CSC 7014 - The Practice of Computer Programming		3
CSC 7132 - Operating Systems and Networking		3	CSC 7132 - Operating Systems and Networking		3
TOTAL CREDITS FOR PROGRAM		33	**TOTAL CREDITS FOR PROGRAM**		33 - 36

Name of Concentration, Program:

Data Science, MS

Old Plan of Study			**New Plan of Study**		
Required Courses **Course number: Title of Course**	Pre-practicum Hours	Credits	**Required Courses** **Course number: Title of Course**	Pre-practicum Hours	Credits
CSC 7050 - Theory of Computation		3	CSC 7050 - Theory of Computation		3
CSC 7400 - Object Oriented Analysis and Design		3	CSC 7400 - Object Oriented Analysis and Design		3
CSC 8050 - Design and Analysis of Algorithms		3	CSC 8050 - Design and Analysis of Algorithms		3
CSC 7013 - Advanced Mathematics for Computer Scientists		3	CSC 7013 - Advanced Mathematics for Computer Scientists		3
CSC 7014 - The Practice of Computer Programming		3	CSC 7014 - The Practice of Computer Programming		3
CSC 7132 - Operating Systems and Networking		3	CSC 7132 - Operating Systems and Networking		3
CSC 7015 - Introduction to Data Science		3	CSC 7015 - Introduction to Data Science		3
CSC 8008 - Data Exploration, Analytics, and Visualization		3	CSC 8008 - Data Exploration, Analytics, and Visualization		3
CSC 8015 - Data Mining and Predictive Analytics		3	CSC 8015 - Data Mining and Predictive Analytics		3
CSC 8016 - Machine Learning for Data Science		3	CSC 8016 - Machine Learning for Data Science		3
TOTAL CREDITS FOR PROGRAM		33	**TOTAL CREDITS FOR PROGRAM**		33 - 36