

 FLORIDA ATLANTIC UNIVERSITY	NEW/CHANGE PROGRAM REQUEST Graduate Programs	UGPC Approval _____ UFS Approval _____ Banner _____ Catalog _____
	Department Chemistry and Biochemistry College Charles E. Schmidt College of Science	
Program Name Postbaccalaureate Research Education Program in Chemistry (PREPChem) Certificate	<input checked="" type="checkbox"/> New Program* <input type="checkbox"/> Change Program*	Effective Date (TERM & YEAR) Spring 2021
Please explain the requested change(s) and offer rationale below or on an attachment. <p>Our proposed bridge program, PREPChem, will require students to take traditional graduate classes in chemistry (9 credits), and undergraduate/graduate classes in fields of artificial intelligence (AI) (6 credits). AI is being used more frequently by chemists to perform various tasks and is becoming an integral part of modern drug discovery processes.</p> <p>PREPChem program is intended for undergraduates who hold a recent bachelor's degree and who have a desire to further build their knowledge and research skills to make them more competitive candidates for admission to graduate school.</p> <p>All required graduate classes, including Graduate Research, are currently existing and offered through the Chemistry Department. Data Science and/or AI classes are offered in College of Science or College of Engineering and Computer Science.</p> <p>Upon completion (15 credits), students will receive a postbac certificate. Credits can be transferred toward the M.S. or Ph.D. program in Chemistry upon admission.</p>		
<small>*All new programs and changes to existing programs must be accompanied by a catalog entry showing the new or proposed changes.</small>		
Faculty Contact/Email/Phone Mare Cudic, Ph.D. mcudic@fau.edu 561-297-4645	Consult and list departments that may be affected by the change(s) and attach documentation College of Engineering, Dept of Computer & Electrical Engineering College of Science, Dept. of Mathematical Sciences	
Approved by Department Chair <u><i>Mare Cudic</i></u> College Curriculum Chair <u><i>Christopher Beetle</i></u> 2020.09.23 10:17:32 -04'00' College Dean <u><i>William David Kulis</i></u> UGPC Chair <u><i>Christopher Beetle</i></u> UGC Chair <u><i>Paul R. Lewis</i></u> Graduate College Dean <u><i>Paul W. Johnson</i></u> UFS President _____ Provost _____	Date 09/14/2020 _____ 09/23/2020 Oct 16, 2020 Oct 16, 2020 Oct 16, 2020 _____ _____	

Email this form and attachments to UGPC@fau.edu 10 days before the UGPC meeting.

Postbaccalaureate Research Education Program in Chemistry (PREPChem) Certificate

PREPChem program is intended for undergraduates who hold a recent bachelor's degree and who have the desire to further build their knowledge and research skills to make them more competitive candidates for admission to graduate school.

The program will require students to take traditional graduate classes in chemistry (9 credits), and undergraduate/graduate classes in fields of artificial intelligence (AI) (6 credits). AI is being used more frequently by chemists to perform various tasks and is becoming an integral part of modern drug discovery processes.

All required graduate classes, including Graduate Research, are currently existing and offered through the Chemistry Department. Data Science and/or AI classes are offered in College of Science or College of Engineering and Computer Science.

Upon completion (15 credits), students will receive a postbaccalaureate certificate. Upon admission to the M.S. or Ph.D. program in Chemistry at FAU, up to 12 graduate credits from this certificate may be applied to the degree program. For questions concerning the transfer of credits to a degree program, contact the Department of Chemistry and Biochemistry.

Required course work:

Introduction to Chemical Research	CHM 5944	1
Graduate Seminar	CHM 6935	1
Instrumentation	CHM 6157	3
Graduate Research	CHM 6918	4
Application of Artificial Intelligence	CAP 2500	3
Introduction to Data Science <u>or</u> Computational Foundations of Artificial Intelligence	CAP 5768 <u>or</u> CAP 5625	3

From: Hanqi Zhuang <zhuang@fau.edu>
Sent: Wednesday, September 9, 2020 9:13 PM
To: Mare Cudic <mcudic@fau.edu>
Cc: Nancy Romance <romance@fau.edu>; Mihaela Cardei <mcardei@fau.edu>
Subject: Re: Proposed New Certificate Program in Chemistry

Dear Mare,

This is to serve as a letter of support by the CEECS Department for your proposed certificate program: Postbaccalaureate Research Education Program in Chemistry (PREPChem) Certificate. We believe that the proposed certificate program aligns well with our educational goals.

One suggestion: The course, CAP 2500 Application of Artificial Intelligence, can be replaced by a graduate course in machine learning: CAP 6616 Applied Machine Learning . In this way they can get graduate credits for MS or PhD programs.

Please let us know if you have any questions.

Best luck,

Hanqi

Hanqi Zhuang, Ph.D.
Professor and Interim Chair
Department of Computer & Electrical Engineering & Computer Science
Florida Atlantic University
Boca Raton, FL 33431
561-297-3413

From: Rainer Steinwandt <RSTEINWA@fau.edu>

Sent: Monday, September 14, 2020 9:35 AM

To: Mare Cudic <mcudic@fau.edu>

Subject: RE: ACS grant

Hello,

Your proposal is completely fine with math – good luck!

Best,
Rainer

Professor and Department Chair; Director, CCIS
Department of Mathematical Sciences
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rsteinwa@fau.edu
Boca Raton - SE43, Room 234A