
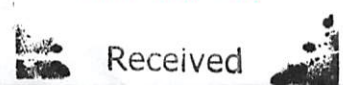


| | | | |
|---|--|---|---|
|  FLORIDA ATLANTIC UNIVERSITY | NEW/CHANGE PROGRAM REQUEST Graduate Programs | | UGPC Approval _____ UFS Approval _____ Banner Posted _____ Catalog _____ |
| | Department Computer and Electrical Eng. and Computer Science College Engineering and Computer Science | | |
| Program Name PhD in Computer Science | <input type="checkbox"/> New Program <input checked="" type="checkbox"/> Change Program | Effective Date (TERM & YEAR) Fall 2019 | |
| Please explain the requested change(s) and offer rationale below or on an attachment CEECS department requests to add a new concentration in Data Science and Analytics to the PhD program in Computer Science. Students enrolled in this concentration will gain expertise, through both coursework and research activity, in theoretical and applied data science and analytics. The admission and degree requirements are described in the attachment. | | | |
| Faculty Contact/Email/Phone Taghi Khoshgoftaar/khoshgof@fau.edu/(561) 297 - 3994 | | Consult and list departments that may be affected by the change(s) and attach documentation NA | |
| Approved by Department Chair <u> <i>Muhammad Sahil</i> </u> College Curriculum Chair <u> <i>[Signature]</i> </u> College Dean <u> <i>M. Cardin</i> </u> UGPC Chair _____ UGC Chair _____ Graduate College Dean _____ UFS President _____ Provost _____ | | Date <u> 2/26/2019 </u> <u> 3/11/19 </u> <u> 3/11/2019 </u> _____ _____ _____ _____ | |

Email this form and attachments to UGPC@fau.edu one week before the UGPC meeting so that materials may be viewed on the UGPC website prior to the meeting.



Doctor of Philosophy with Major in Computer Science

Data Science and Analytics Concentration

The PhD in Computer Science program with concentration in Data Science and Analytics requires gaining expertise, through both coursework and research activity, in theoretical and applied data science and analytics.

Admission Requirements

The applicants are required to meet all the admission requirements for the Doctor of Philosophy with Major in Computer Science program.

Degree Requirements

The applicants are required to meet all the degree requirements for the Doctor of Philosophy with Major in Computer Science program. In addition, the following requirements must be met:

1. The graduate coursework counted in the PhD program must contain at least 4 graduate courses from Table 1. These courses focus on theoretical and/or applied data science and analytics. Additional courses may be approved by the dissertation advisor. Graduate courses completed during a master's degree can be used to meet this requirement.
2. The student's PhD dissertation research and scholarship must have a strong emphasis on one or more areas of data science and analytics, including, but not limited to applied and/or theoretical areas.

Table 1

| | | |
|--|----------|---|
| Introduction to Data Science | CAP 5768 | 3 |
| Introduction to Neural Networks | CAP 5615 | 3 |
| Social Networks and Big Data Analytics | CAP 6315 | 3 |
| Data Mining for Bioinformatics | CAP 6546 | 3 |
| Data Mining and Machine Learning | CAP 6673 | 3 |
| Information Retrieval | CAP 6776 | 3 |
| Natural Language Processing | CAP 6640 | 3 |
| Sparse Learning | CAP 6617 | 3 |
| Web Mining | CAP 6777 | 3 |
| Advanced Data Mining and Machine Learning | CAP 6778 | 3 |
| Machine Learning for Computer Vision | CAP 6618 | 3 |
| Big Data Analytics with Hadoop | CAP 6780 | 3 |
| Computer Performance Modeling | CEN 6405 | 3 |
| Deep Learning | CAP 6619 | 3 |
| Computational Advertising and Real-Time Data Analytics | CAP 6807 | 3 |
| Artificial Intelligence | CAP 6635 | 3 |

GRADUATE COLLEGE

MAR 22 2019

Received