FLORIDA ATLANTIC

COURSE CHANGE REQUEST Graduate Programs

Department Electrical Engineering and Computer Science

| UGPC Approval | | | | |
|----------------|--|--|--|--|
| UFS Approval | | | | |
| SCNS Submittal | | | | |
| Confirmed | | | | |
| Banner | | | | |
| Catalog | | | | |

| UNIVERSITY | College Engineering and Computer Science | | | Catalog | |
|--|--|-------------------------|---|-----------------------|--|
| Current CourseCurrent CoPrefix and NumberCAP 6617CAP 6617Sparse Letter | | | | | |
| Syllabus must be attached for ANY changes to current course details. See <u>Template</u> . Please consult and list departments that may be affected by the changes; attach documentation. | | | | | |
| Change title to: | | | Change description to: | | |
| Change prefix From: | To: | | | | |
| Change course number | | | Change prerequisites/minimum grades to: | | |
| From: | To: | | CAP 5625 | | |
| Change credits* | | Change corequisites to: | | | |
| From: | To: | | | | |
| Change grading | | | | | |
| From: | From: To: Change registration | | | ontrols to: | |
| Academic Service | ce Learning (ASL) ** | | | | |
| Add | Remove | | | | |
| * See <u>Definition of a Credit Hour</u> . ** Academic Service Learning statement must be indicated in syllabus and approval attached to this form. | | | Please list existing and new pre/corequisites, specify AND or OR and include minimum passing grade. | | |
| Effective Term/ for Changes: | | | Terminate course? Effor Termination: | ective Term/Year | |
| Faculty Contact/Email/Phone Dr. Masoud Jahandar Lashaki, Graduate Program Director mjahandarlashaki@fau.e | | | | | |
| Approved by Haikalva | | | | Date 1/15/2025 | |
| Department Chair | | | | 1/21/2025 | |
| College Curriculum Chair Francisco Presuel-Moreno | | | 2/18/2025 | | |
| College Dean Raquel Assis | | | 02/19/2025 | | |
| UGPC Chair Advir Sementelli (Feb 19, 2025 15:56 EST) | | | 02/19/2025 | | |
| UGC Chair April Sementelli (Feb 19, 2025, 15-56, FST) April Sementelli (Feb 19, 2025, 15-56, FST) | | | 02/19/2025 | | |
| Graduate College Dean | | | | <u> </u> | |
| UFS President _ | | | | | |
| Provost | | | | | |

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

Sparse Learning (CAP 6617) 3 credits

Prerequisite: CAP 5625

This course introduces new concepts, theory, algorithms and applications of sparse representation and modeling, and their relationship with deep learning. Topics covered include mathematical preliminaries, L1 optimization, pursuit algorithms, sparse representation classifiers, sparse dictionary learning, sparse deep learning and applications.