To: Dr. Carla Ellis, Chair
    Undergraduate Curriculum Committee

Through: Dr. Theresa A. Maldonado, Dean
        College of Engineering

Through: Dr. Louis Everett, Chair
        College of Engineering Curriculum Committee

From: Dr. Miguel Velaz-Reyes, Chair
      Electrical and Computer Engineering

Date: September 17, 2019

RE: Changes to EE 4365

The faculty of the ECE Department approved changes in the title, description and pre-requisites for EE 4365. These changes update the course course content and title to align in with new trends in machine learning. This is a key technology area and having our academic offering updated to support student training in these area is of great importance.

This should have been included as part of the curricular change processed in AY 2018-19. It was not included by mistake.
The University of Texas at El Paso

Curriculum Change Proposal

Approval Page

Proposal Title: Changes of EE 4365

Department Chair
I have read the enclosed proposal and approve this proposal on behalf of the department.

Signature

July 2, 2019
Date

College Curriculum Committee Chairperson
I have read the enclosed documents and approve the proposal on behalf of the college curriculum committee.

Signature

9/18/19
Date

College Dean
I have read the enclosed documents and approve the proposal on behalf of the college.
I certify that the necessary funds will be allocated by the college in support of this proposal.

Signature

9/23/2019
Date

Graduate Council/Undergraduate Curriculum Committee

Council Action: □ Approved □ Returned to the College

Date of Action Report:

Signature, Chairman

Date
COURSE CHANGE FORM

All fields below are required

College: Engineering  Department: Electrical & Computer Engineering

Rationale for changing the course:
Changes in course title and description reflect the direction that the profession has taken, with respect to advances, terminology, and tools.

Change in prerequisite reflects the change in focus of the course. Less emphasis on algorithms that rely on statistical and probabilistic methods (deletion of EE 3384, Probabilistic Methods for Engineers & Scientists) to new emphasis on implementation of complex algorithms in appropriate languages (addition of EE 2372, Software Design I).

All fields below are required

Subject Prefix and number EE 4365

Course Title  Topics in Soft Computing

<table>
<thead>
<tr>
<th>Change</th>
<th>From</th>
<th>To</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ex. Prerequisite</td>
<td>Ex. POLS 2310</td>
<td>Ex. POLS 2312</td>
</tr>
<tr>
<td>Course Title</td>
<td>Topics in Soft Computing</td>
<td>Foundations of Deep Learning</td>
</tr>
<tr>
<td>Course Description</td>
<td>Basic concepts and techniques of soft computing, including neural, fuzzy, evolutionary, and interval computations, and their applications.</td>
<td>Concepts and techniques in deep learning in AI. Historical and current paradigms for implementation, and their applications.</td>
</tr>
<tr>
<td>Prerequisites</td>
<td>EE 3353 w/C or better AND EE 3384 w/C or better</td>
<td>EE 2372 w/C or better AND EE 3353 w/C or better</td>
</tr>
</tbody>
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