

# Graduate Council Minutes

Thursday – August 18, 2022

<https://unt.curriculog.com/agenda:541/form>

Zoom mtg. ID: 892 5846 0381

**Note: Course changes and additions will not take effect until they are listed in the graduate catalog. Items marked with an asterisk (\*) must have approval by the Texas Higher Education Coordinating Board before listing in the graduate catalog. Items marked with a plus (+) must be approved by the Department of Education before being listed in the graduate catalog.**

**Graduate Council Voting Members:** *Selcuk Acar (absent), Douglas Brozovic(absent), Kris Chesky (absent), Gurpreet Dhillon (absent), Jaymee Haefner (absent), John Martin, Gwen Nisbett, Denise Philpot, Lawrence Williams, Dale Yeatts, Paul Hudak*

## I. ANNOUNCEMENTS

### Victor Prybutok:

- Welcomed all Graduate Council members and attendees
- Kris Chesky will be out for today's meeting and Dale Yeatts will be stepping in as Faculty Chair in his absence
- Thanked GC members whose term ends this month: Denise Philpot, Jaymee Haefner & Kris Chesky
  - Next month we will be introducing new & continuing members

### Dale Yeatts:

- Welcomed all Graduate Council members and attendees
- Reminded voting members on how to submit their vote and motion

## II. MINUTES

**MOTION TO VOTE ON ITEM II-1 – UNANIMOUS APPROVAL**

**UNANIMOUS APPROVAL OF ITEM II-1.**

II-1. Approval of July 21, 2022, minutes

## III. CHAIR / TGS DISCUSSION ITEMS / ACTION ITEMS / INFORMATION ITEMS

### Toulouse Graduate School

**Advanced Data Analytics** (action-information items)

**MOTION TO VOTE ON ITEMS III-1. THROUGH III-3. AS A BLOCK – UNANIMOUS APPROVAL**

**UNANIMOUS APPROVAL OF ITEMS III-1. THROUGH III-3.**

For items III-1. through III-3.: (requested exception yr.: 2022-23; **Rationale for each:** This course is one of a suite of 1-credit “microcourses” created as part of a funded Texas Higher Education Coordinating Board grant program - Accelerating Credentials of Purpose and Value Grant Program - to develop pathways for students to obtain certificates and degrees in the high-demand field of data analytics. The grant proposal set a target of Fall 2022 and

Spring 2023 for offering the full set of microcourses. In coordination with UNT Registrar, this course will be offered in the Spring 2023 semester.)

**III-1. [ADTA 5340A - Exploring Machine Learning and AI](#)**

**Description:** Explores interdependency of machine learning and artificial intelligence. Fundamentals of programming in Python are introduced with machine learning and AI applications relevant to business, industry, and science.

**III-2. [ADTA 5340B - Exploratory Data Analysis, Visualization, & Supervised Machine Learning](#)**

**Description:** Develops comprehensive understanding of supervised machine learning methods and applications, including the use of exploratory data analysis and visualization in preparation for applying methods and assessing results. Students apply course topics to real world case studies with complex datasets.

**III-3. [ADTA 5340C - Clustering with Unsupervised Machine Learning](#)**

**Description:** Introduces clustering methods with unsupervised machine learning algorithms. Applies course topics to real world case studies with complex datasets, emphasizing the appropriate use of methods and interpretation of results.

**IV. REQUEST FOR NEW COURSES**

**Toulouse Graduate School**

**Advanced Data Analytics**

**MOTION TO VOTE ON ITEMS IV-1. AND IV-2. AS A BLOCK – UNANIMOUS APPROVAL**

**UNANIMOUS APPROVAL OF ITEMS IV-1. AND IV-2.**

For items IV-1. and IV-2.: (requested exception yr.: 2022-23; **Rationale for each:** This course will be one of 4 ADTA courses (2 existing course, 2 being proposed) forming a new concentration in AI/Machine Learning. This concentration is in response to student demand. Allowing the course to be offered by Spring 2023 will allow students to complete the concentration by spring 2023 graduation.)

**IV-1. [ADTA 5750 - Applied Natural Language Processing](#)**

**Description:** Introduces fundamentals of Natural Language Processing (NLP), providing a guide to applying novel and pre-trained NLP systems in business and other real-world environments. Presents contemporary methods and tools used to perform a variety of language-related analysis, such as text understanding and text classification, in a low-code development environment. Emphasizes the practical implementation of Natural Language Processing methods to solving business, industry, and science problems.

**IV-2. [ADTA 5760 - Natural Language Processing with Artificial Neural Networks](#)**

**Description:** Introduces theory and the practical implementation of Natural Language Processing (NLP) using artificial neural networks. Provides experience applying current neural network frameworks to build, train, and test NLP models. Emphasizes the practical implementation of AI techniques to develop NLP solutions for business, industry, and science applications

**V. REQUEST FOR ADD NEW OR DELETE EXISTING MAJOR/PROFESSIONAL FIELD, CONCENTRATION, OPTION, MINOR, CERTIFICATE (excluding GACs), OR SPECIALIZATION**

**Toulouse Graduate School**

### Advanced Data Analytics

#### MOTION TO VOTE ON ITEMS V-1. AND V-2. AS A BLOCK – UNANIMOUS APPROVAL

#### UNANIMOUS APPROVAL OF ITEMS V-1. AND V-2.

**V-1. Advanced Data Analytics with a concentration in Applied Artificial Intelligence, MS** (add concentration) (requested exception yr.: 2022-23; **Rationale:** This concentration includes two existing ADTA courses and two new, concurrently proposed courses. This concentration is in response to student demand. Allowing the concentration to be in place by Spring 2023 will allow students to complete the concentration by spring 2023 graduation, since many students will have completed all 4 concentration courses then.

**Justification:** Artificial Intelligence (AI) methods are becoming increasingly important in data analytics/science applications in business and industry. Knowledge and experience applying AI methods and tools in a business context provides students with important skills to stand out in the high-demand data analytics job market. The courses in the proposed concentration provide students with this experience and the concentration signals to potential employers that students have these valuable skills.

**Description:** The MS in Advanced Data Analytics provides students the foundational academic and practical preparation necessary to meet the growing demand for analytics professionals in business and industry. The concentration in applied artificial intelligence provides additional in-depth knowledge and experience applying AI methods and tools in a business context, giving students important skills to stand out in the high-demand data analytics job market.

**V-2. Advanced Data Analytics with a concentration in Geographic Information Systems (GIS), MS** (add concentration)

**Justification:** Knowledge and experience applying geospatial analytics are in high-demand within several business and government career tracks, including retail location analysis, intelligence analysis, and geographical image analysis. The UNT Department of Geography & the Environment has a strong record of aligning its GIS courses with the current needs of employers. Utilizing the proposed courses allows ADTA to create a “ready-made” concentration, giving students important skills to stand out in the high-demand data analytics job market. The courses in the proposed concentration signal to potential employers that students have valuable geospatial analysis skills.

**Description:** The MS in Advanced Data Analytics provides students the foundational academic and practical preparation necessary to meet the growing demand for analytics professionals in business, industry, and government. The concentration in geographic information systems (GIS) provides a sound understanding and experience in geospatial data management, analysis, research, visualization, and mapping. The concentration is ideal for those wishing to pursue careers utilizing geospatial analytics in government and business.

- VI. REQUEST FOR ALL GRADUATE ACADEMIC CERTIFICATES
- VII. REQUEST FOR NEW GRADUATE TRACK PATHWAYS
- VIII. REQUEST FOR CHANGE IN PROGRAM, MAJOR, MINOR, DEGREE, OPTION, CONCENTRATION OR REQUIREMENTS

### College of Information

#### Department of Learning Technologies

#### MOTION TO VOTE ON ITEM VIII-1. – UNANIMOUS APPROVAL

#### UNANIMOUS APPROVAL OF ITEM VIII-1.

**VIII-1. Learning Technologies, PhD** (change in hours; no increase-decrease in change of hours for degree) (requested exception yr.: 2022-23; **Rationale:** New research framework (PhD) begins in Fall 2022. New Cohort (26) have been advised to take courses based on new framework.)

**Justification:** Based on the new research framework, we are increasing the number of research hours required from 12 to 18. We are decreasing the number of Topic hours from 21 to 15 hours.

Research: 12 to 18, increased by 6 hours  
Topics: 21 to 15, decreased by 6 hours

**A. In Grad Track**

**College of Engineering**

**Department of Biomedical Engineering**

**MOTION TO VOTE ON ITEM VIII-2. – UNANIMOUS APPROVAL**

**UNANIMOUS APPROVAL OF ITEM VIII-2.**

**VIII-2. Biomedical Engineering, BS with grad track option leading to Biomedical Engineering, MS** (change in requirements)

**Justification:** Addition of a new course BMEN 5007 (BMEN 4007 -UG course) to BMEN grad track options

**IX. REQUEST FOR DUAL OR JOINT DEGREE PROGRAMS**

**X. CONSENT CALENDAR**

**A. Course Changes**

**B. Course Deletions**

**C. Information Item-THECB Delete**

**NO NEW BUSINESS**

**REQUEST TO ADJOURN MEETING – UNANIMOUS APPROVAL**