



TEXAS TECH UNIVERSITY

## College of Media & Communication

Whether you are a scientist, engineer, IT professional, medical technician, health care professional, or a communication professional who works in the STEM fields, Texas Tech University's new **Online Graduate Certificate in STEM Leadership Communication** is designed to give you the communication skills you need to reach your full potential as a corporate, public-sector, or academic leader.

Consider the following...

- In a 2015 survey conducted by the National Association of Colleges and Employers (NACE), employers selected **“ability to work in a team structure,” “ability to make decisions and solve problems,” and “ability to verbally communicate with persons inside and outside the organization”** as the top three attributes they look for when they hire new employees.
- The NACE survey also suggests that when employers are faced with two candidates who are equal in GPA, the top attribute they will consider in making their decision is **leadership skills.**<sup>1</sup>
- In a 2011 survey by the American Society of Mechanical Engineers, respondents to an open-ended question about the “most needed” skills for engineers in the future offered **“Communications”** as the top response (20%). This was ranked just above skills in “Computer Programming/Software” (19%), “Multidisciplinary” (14%), and “Business” (11%).<sup>2</sup>
- One of the fastest growing categories of US jobs, according to a 2015 report by the Business Higher Education Forum (BHEF), is **“data-driven decision makers.”** This category accounts for 67% of the total “data science and analytics” jobs in 2015 US job postings.<sup>3</sup> “Data-driven decision makers,” according to this BHEF report, are organizational leaders who must possess both technical expertise and leadership abilities.<sup>4</sup> To be successful in these positions requires **“a mix of technical and social skills,”** and an ability to **“understand what is happening or has happened in the data.”**<sup>5</sup>

Whether you are a working professional or a degree-seeking graduate student, Texas Tech's new graduate certificate in STEM Leadership Communication is designed to give you the skill set and credentials that today's employers demand.

Learn more at <https://www.depts.ttu.edu/comc/graduate/certificates/stem/index.php>

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<sup>1</sup> National Association of Colleges and Employers, 33.

<sup>2</sup> American Society of Mechanical Engineers, *The State of Mechanical Engineering: Today and Beyond*, accessed May 22, 2017, <https://www.asme.org/getmedia/752441b6-d335-4d93-9722-de8dc47321de/State-of-Mechanical-Engineering-Today-and-Beyond.aspx>.

<sup>3</sup> Business Higher Education Forum, *Investing in America's Data Science and Analytics Talent*, accessed May 6, 2017, <https://www.pwc.com/us/en/publications/data-science-and-analytics-skills.html>.

<sup>4</sup> Business Higher Education Forum, 4.

<sup>5</sup> Business Higher Education Forum, 12.

## *FAQ*

### *How do I apply?*

Please contact Mary S. Norman, Ph.D. ([mary.s.norman@ttu.edu](mailto:mary.s.norman@ttu.edu)) to apply or to learn more.

### *What are the certificate requirements?*

#### **THREE REQUIRED CORE COURSES**

**COMS 5314: Professional Communication in Health, Science, and Technology**

**MCOM 5324: Audience/Data Analysis and Reporting**

**MCOM 5350: STEM Leadership Communication Capstone Course**

#### **ELECTIVE**

You must take one elective. You can choose from the list below, or you can choose another appropriate course, with advisor approval. If you're a current graduate student in another program, you may be able to use a course in your home discipline as an elective.

**COMS 5302: Intercultural Communication**

**MCOM 5316: Communication in Organizations**

**COMS 5313: Theories of Persuasion**

**MCOM 5364: Research Methods**

**MCOM 5318: Advanced Social Media Practice**

**MCOM 5326: Risk Communication/Management**

**MCOM 5332: Special Topics in Strategic Communication**

**MCOM 5334: Interpersonal Communication**

**MCOM 6310: Contemporary Issues in Communications Technology**

### *How long does it take to complete the certificate?*

Because the certificate is fully online, you can complete it on your own time, at your own pace, without quitting your day job. You might choose to complete the required coursework in as little as two semesters, or you might want to take longer. Many assignments in the required courses are designed to build from your regular workplace activities and tasks, so you can expect to start gaining skills and insights that benefit you on the job right away.