# Undergraduate Certificate in Data Analytics:

**"Data analyst" is one of the most in-demand job titles** and Data Analytics certificate is ideal for all working professionals as well as for future professionals. Grambling State University (GSU) is offering Undergraduate Certificate program in Data Analytics to mitigate the talent shortage of job applicants with data analytics skills by producing well-trained data analyst professionals. This certificate program does not require prior coding or programming knowledge. It covers essential job-critical topics such as data analysis, statistical analysis, data visualization, Data Mining in Bioinformatics, business and social media analysis, and related elective topics.
This certificate program transforms students' career with the essential industry needed skills as a career employability booster.

With advancements in technology, more than half of the global population has access to the internet. This results in the creation of large and disparate volumes of data. The data, from a variety of sources, should be analyzed in a timely manner to make informed decisions. For this reason, **data analytics is one of the fastest-growing and highest-paid professions around the world**. Data analytics is a discipline that uses statistical tools and machine learning algorithms to extract useful and hidden information from data. As long as data are available, data analytics techniques can be adopted to make the data useful. Data are gold mines if they can be properly processed to gain useful knowledge. Educational institutions, governments, medical institutions, Fortune 500 companies, and mom & pop businesses are using data to not only improve core operations but to launch entirely new business models. These organizations rely on data to make data-driven business decisions.

**The program objectives of the Data Analytics undergraduate certificate program are captured below.**
- Promote the value of data analytics to the efficient operation of businesses and governments.
- Provide a certificate that can be tailored to meet the needs of STEM and non-STEM disciplines.
- Provide comprehensive knowledge of data mining techniques.
- Provide the connection between extracting meaningful information from data and decision making across disciplines.

**Upon completion of the Data Analytics undergraduate certificate program students will have acquired the following competencies.**
- Use data analytics to make business decisions.
- Adhere to ethical guidelines that include privacy rights while executing tasks associated with analysis of data and development of reports.

- Demonstrate the use of different data mining techniques and tools including R, Python, SAS and Tableau.
- Apply theoretical and practical knowledge for solving real world problems.
- Communicate effectively with a range of audiences through story telling using data visualization, project reports and presentations.
- Develop and deploy predictive, prescriptive and descriptive analytics models.

As shown on the table below, GSU students pursuing the Undergraduate Certificate in Data Analytics will take 12 credit hours of core courses. These core courses include Introduction to Data Analytics, Foundations of Statistical Analysis, Data Visualization and Advanced Data Analytics. Students will be able to select the additional six credit hours from electives that are aligned with career goals.

**For more information, please contact:**

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