

Degree: BIT Data Analytics for Technology Graduate Certificate (DAT)

<p>Program Description</p>	<p>The business intelligence and analytics discipline has become very important in information systems and industry, due to increased access to big data, unstructured and structured data, and strategic business decision making. These increasingly complex decision making capabilities lead directly to competitive advantage and increased profits. Thus, trained business analysts with skills in addressing data management and business intelligence and analytics are in high demand. Memphis-area companies are particularly interested in employees and applicants with business intelligence and analytics skills. The objectives of this certificate program will be to educate individuals in the current tools, techniques, and processes of business intelligence and analytics, so that they can effectively contribute to industry analytics efforts with a specific emphasis in the integration of data from a variety of business processes and sources. It will also develop individuals' applied data analytics skills so that they can serve in appropriate corporate roles. Specifically, it will deal with techniques and methods, including artificial neural networks, decision trees, nearest neighbor approaches, predictive modeling, and genetic algorithms. The program will offer guidance on building the business case, building the model including problem definition and data evaluation, and evaluation of the model.</p>
<p>Why Created, Who Served</p>	<p>Trained business analysts with data management skills and business analytics skills are in high demand. We created this certificate program to educate individuals in the current tools, techniques, and processes of business intelligence and analytics so that they can effectively contribute to industry analytics efforts. The Data Analytics for Technology certificate program serves individuals with an interest in acquiring applied data management and analytics skills as well as Memphis-area businesses that are particularly interested in improving existing employees' data management and analytics skills and/or hiring new employees with these skills.</p>
<p>Faculty Leaders</p>	<p>Ali Adeli, Mark Gillenson, Naveen Kumar, Srikar Velichety, Chen Zhang</p>

		Fair	Good	Exemplary	Measures	
		Did Not Meet Expectations, Limited Accomplishments	Met Expectations, Some Problems, Needs Improvement	Met Expectations, Considerable Expertise Shown With Project	Direct or Indirect Measurements and/or Measurement Links	
Score:		1	2	3		
<p>Learning Outcome #1</p>	<p>Graduates will be able to understand and analyze business problems in the context of business intelligence and analytics.</p>	<p>Inadequately or inaccurately identify, describe, and define business problems related to business intelligence and analytics.</p>	<p>Demonstrate competence in identifying, describing, and defining business problems based on the business' analytics needs.</p>	<p>Effectively identify, describe, and define business problems in detail given the business' analytics needs.</p>	<p>Projects, exams, and reports</p>	<p>MIS-7620, MIS-7621</p>

		Did Not Meet Expectations, Limited Accomplishments	Met Expectations, Some Problems, Needs Improvement	Met Expectations, Considerable Expertise Shown With Project	Direct or Indirect Measurements and/or Measurement Links	
	Score:	1	2	3		
Learning Outcome #2	Graduates will be able to identify appropriate analytics methodology and approaches to solve the business problem.	Vague or inaccurate identification of relevant analytics methodology and approaches given a business problem.	Clear identification of some relevant analytics methodology and approaches given a business problem.	Detailed and accurate identification of all relevant analytics methodology and approaches appropriate for the business problem.	Assignments, exams, and projects	MIS-7190, MIS-7620, MIS-7621
Learning Outcome #3	Graduate will be proficient in the use of current analytics tools and software packages.	Be able to use the most basic features of current analytics tools and software packages; has difficulty in using them to solve analytics problems.	Be able to use some of the features of current analytics tools and software packages; demonstrate competence in using them to solve a limited set of analytics problems.	Be able to effectively use most of the features of current analytics tools and software packages; demonstrate a high level of proficiency in using them to solve various analytics problems.	Projects, hands-on activities, exams, reports, assignments	MIS-7190, MIS-7660, MIS-7620, MIS-7621
Learning Outcome #4	Graduates can demonstrate how to use contemporary data management techniques that can prepare data for analytics problems and solutions.	Demonstrate vague understanding and has difficulty in applying contemporary data management techniques.	Understand and demonstrate competence in applying contemporary data management techniques.	Fully understand and skillfully apply contemporary data management techniques.	Hands-on activities, reports, exams	MIS-7660