

## MS in Information Systems Program Overview Orientation

August 21, 2023



### Welcome MSIS Incoming Fall 2023 Cohort



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### Our history and You

- The MSIS program was launched in 2011 with 17 students
- Highly ranked program
- The incoming Fall 2023 cohort consists of 170 students in the graduate program and 43 high performing undergraduate students who will take some courses with you and plan to enroll in the program in the future
- MSIS is the largest as well as the most selective MS program in the Robert H Smith School of Business



### A brief description of the incoming Fall 2023 cohort

- You hail from Azerbaijan, Bangladesh, China, Ethiopia, India, Malaysia, Myanmar, Nigeria, Pakistan, Russia, Taiwan, and the United States
- 38% of you identify as female
- On average you have 18 months of work experience – ranging from no experience to 9.5 years of work experience – the median work experience is 12 months
- Your average age is 24 years
- You have an average undergraduate GPA of 3.5, your average GMAT is 690 and your average GRE is 313
- You have undergraduate degrees in Arts, Business Administration, Engineering, Science, Technology
- Your majors have included Accounting; Accounting & Information Systems; Business Admin; Chemical Engineering, Civil Engineering, Computer Engineering, Electrical Engineering, Electronics & Telecommunication, Economics, Finance, Information Technology, Information Systems, Supply Chain Management, Physics, Foreign Affairs

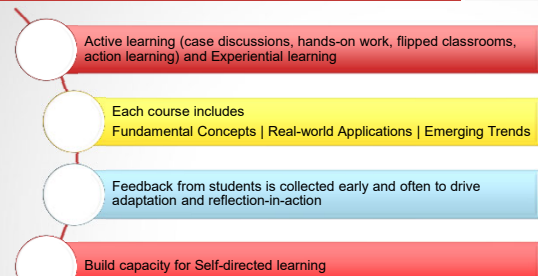


### Curriculum Overview

- Business-technology strategy (4 credits)
- Technical foundations (7 credits)
- Modeling and analytics (6 credits)
- Emerging technologies (4 credits)
- Enterprise architecture & practice (9 credits)



### Teaching Ethos



### MSIS Course Structure

First Semester (Fall)	Second Semester (Spring)	Third Semester (Fall)
<ul style="list-style-type: none"> <li>- Database Management (2) (A&amp;B) (BUDT702)</li> <li>- Data, Models, and Decisions using R (2) (A&amp;B) (BUDT731)</li> <li>- Data Processing and Analysis in Python (3) (A&amp;B) (BUDT704)</li> <li>- Digital Platforms and Ecosystems (2) (A) (BUDT722)</li> <li>- Technology &amp; Strategy (2) (B) (BUDT721)</li> <li>- Project Management (2) (B) (BUDT724)</li> <li>- Industry Seminar (required for BUDT748) (A&amp;B) (BUDT738)</li> </ul> <p>Total: 13 credits</p>	<ul style="list-style-type: none"> <li>- Business Process Analysis (2) (C&amp;D) (BUDT723)</li> <li>- Data Science and Predictive Analytics (2) (C) (BUDT733)</li> <li>- Big Data and Cloud Computing (2) (C) (BUDT737)</li> <li>- Harnessing AI for Business (2) (D) (BUDT751)</li> <li>- Emerging Technologies (2) (D) [Blockchain and Smart Contracts (BUDT753) OR IoT Applications for Business (BUDT754)]</li> <li>- Industry Seminar (required for BUDT748) (A&amp;B) (BUDT738)</li> </ul> <p>Total: 10 credits</p>	<ul style="list-style-type: none"> <li>- Industry Practicum (3) (A&amp;B) (BUDT748)</li> <li>- Advanced Topics in Data Science (2) (A) [Causal Inference (BUDT756) OR Social Media &amp; Unstructured Data Analytics (BUDT706) OR Data Visualization for Business (BUDT705)]</li> <li>- Topics in Technology Management (2)(A) [Cybersecurity (BUT757) OR Digital Health (BUDT741) OR Machine Learning &amp; Blockchain for FinTech (BUDT742)]</li> </ul> <p>Total: 7 credits</p>

Numbers in parentheses represent course credits

### MSIS Focus Areas

Artificial Intelligence	Cloud Computing
<ul style="list-style-type: none"> <li>- Data, Models, and Decisions using R (BUDT731)</li> <li>- Harnessing AI for Business (BUDT751)</li> <li>- Causal Inference (BUDT756)</li> <li>- Machine Learning &amp; Blockchain for FinTech (BUDT742)</li> </ul>	<ul style="list-style-type: none"> <li>- Digital Platforms and Ecosystems (BUDT722)</li> <li>- Big Data and Cloud Computing (BUDT737)</li> <li>- Digital Health (BUDT741)</li> <li>- Cybersecurity (BUT757)</li> </ul>
Data Science	Emerging Technology
<ul style="list-style-type: none"> <li>- Database Management (BUDT702)</li> <li>- Data Science and Predictive Analytics (BUDT733)</li> <li>- Social Media &amp; Unstructured Data Analytics (BUDT706)</li> <li>- Data Visualization for Business (BUDT705)</li> </ul>	<ul style="list-style-type: none"> <li>- Technology &amp; Strategy (BUDT721)</li> <li>- Blockchain and Smart Contracts (BUDT753)</li> <li>- IoT Applications for Business (BUDT754)</li> <li>- Causal Inference (BUDT756)</li> </ul>

### MSIS Program Curriculum

<b>Business-Technology Strategy (4 credits)</b>	Digital Platforms & Ecosystems (2), Technology & Strategy (2), Industry Seminar
<b>Technical Foundations (7 credits)</b>	Database Management (2), Data Processing & Analysis in Python (3), Technology Project Management (2)
<b>Modeling &amp; Analytics (6 credits)</b>	Data, Models and Decisions (2), Data Science & Predictive Analytics (2), Advanced Topics in Data Science (2) (Causal Inference, or Social Media & Unstructured Data Analytics or Data Visualization)
<b>Emerging Technologies (4 credits)</b>	Harnessing AI (2), Emerging Technologies (2) (Blockchain & Smart Contracts, or IoT Enabled Business Models)
<b>Enterprise Architecture &amp; Practice (9 credits)</b>	Business Process Analysis (2), Cloud Computing (2), Special Topics in Technology Management (2) (Cybersecurity, or FinTech, or HealthTech), Capstone/Practicum (3)

### Aligning the Curriculum with Employment Opportunities

<b>Business-Technology Strategy (4 credits)</b>	Associate Consultant, Business Consultant, Business Analyst, Pricing Analyst, Product Manager
<b>Technical Foundations (7 credits)</b>	Software Engineer, Data Engineer, Database Engineer, Data Modeler, Data Architect, Application Architect, Technology Consultant
<b>Modeling &amp; Analytics (6 credits)</b>	Data Analyst, Machine Learning Engineer, Big Data Developer, Business Intelligence Analyst, Business Intelligence Developer
<b>Emerging Technology (4 credits)</b>	Data Scientist, Solutions Architect, R&D Associate, R&D Engineer
<b>Enterprise Architecture &amp; Practice (9 credits)</b>	Risk Assurance Associate, Cloud Support Associate, Project Manager, Product Operations Engineer, Cybersecurity Associate, Enterprise Architect

### Experiential Learning

### Experiential Learning

**Past Employers**

Let us talk about ...

# CRITICAL SUCCESS FACTORS

**Critical Success Factors**

- Learning focus always
- Engage with open hearts and minds
- Academic integrity
- Perseverance on the “treadmill”

**Call to Action**

- Join the IS LinkedIn Group  
<https://www.linkedin.com/groups/13782206/>

- Remember, I love spending time with you so please reach out any time at [tejanand@umd.edu](mailto:tejanand@umd.edu) 914-473-1802

**SAC**  
SMITH ANALYTICS CONSORTIUM  
<http://go.sac.umd.edu>

Expanding understanding of business analytics and relevant careers  
"Analytics for All"

**Lunch & Learn Series**  
The Lunch & Learn Series connects students with industry experts, offers learn-alongs, access resources for technical insights into real-world analytics applications.

**Datathon**  
The Datathon bridges academia & industry into a multi-day data-focused competition. Interdisciplinary teams apply their problem-solving, data analysis, business strategy, teamwork, and presentation skills to address real-world business problems for prizes awarded by industry judges. Students are able to network with industry professionals.

**Experiential Learning**  
SAC provides more classroom-based experiential activities so that students can have their academic knowledge use transferable skills in the real world, connecting insights.

**Deloitte**

"This wasn't just a data-driven project; it was a real-world challenge that allowed us to apply our skills in a practical setting." - Student

"It's one of the ways that we can give our students a real-world experience." - Professor