



MGS 618 Adopting Generative AI in the Enterprise

Fall 2024

Instructor	Email	Office Location & Hours
Victor Stachura	victorst@buffalo.edu vstachura@gmail.com	Upon request

Course Description

Every company is facing the issue of 'how do we incorporate Generative AI into our environment'? What is the business case? How much investment is required? How can Generative AI help our business?

This course is designed to equip students with the knowledge and skills necessary to answer those questions and others - key questions being asked by every CEO, CIO and senior business leader.

The course combines consulting principles, the art of solution architecture and the technical knowledge of Generative AI, to provide a comprehensive understanding of the strategic, technical, and operational aspects of adopting Generative AI into a business. Students will explore various Generative AI concepts and models, as well as developing their consulting and solutioning skills. Students will be working in teams to analyze a case study, develop and present a solution proposal and demonstrate the capabilities of Oracle's AI Vector search with Oracle's Autonomous Database.

Students will also be given access to Oracle's cloud platform for use in the class project.

There will also be one or more guest lectures covering career growth and generative AI.

Jobs this class prepares you for:

- Consulting - IT Strategy
- Solution Architect - Acting as a technology lead / consultant you work with business partners to define a set of technology investments that ultimately lead to better business results
- Pre-sales Solution architect
- Enterprise architect
- Business architect / analyst

Learning Outcomes

This course is offered in a lecture style with a semester-long project and hands-on exercises during the classes. Students will work on a business case describing a large corporation that is looking to adopt Generative AI in their enterprise. The leadership is “buzzword compliant” with Gen AI and lacks the knowledge and expertise to adopt this groundbreaking technology.

Each lecture will focus on one topic, describing key concepts and techniques. Students will then apply those concepts and develop an approach and business case for the company described in the case study.

During the project students will build presentations describing their solutions & recommendations for the company in the case study.

Students will organize into teams and work collaboratively during the semester. Class time will be divided into lectures and group activities. Students will be expected to present their recommendations to the class several times during the semester.

Jobs this class prepares you for:

- Consulting - Generative AI
- Solution Architect - Acting as a technology lead / consultant you work with business partners to define a set of technology investments that ultimately lead to better business results
- Pre-sales Solution architect
- Enterprise architect
- Business architect / analyst

Students will be able to achieve the following learning objectives at the completion of the course

- a) Be able to explain strategies and techniques for effective adoption of Generative AI and other emerging technologies

- b) Be able to define Generative AI and explain real world problem(s) that Generative AI can solve.
- c) Understand and describe how Generative AI works, explain the underlying technology.
- d) Understand the role of Enterprise Architecture in driving business strategy and IT investments
- e) Develop communication, presentation and financial modeling skills
- f) Able to develop enterprise solutions, develop recommendations and deliver effective executive presentations

Required Text(s) & Materials

- a) "Flawless Consulting: A Guide to Getting Your Expertise Used" 4th Edition, by Peter Block, ISBN-13 978-1394177301
- b) "Introduction to Generative AI", Numa Dhamani and Maggie Engler. ISBN 9781633437197

Course Delivery:

The course is delivered lecture style. All material will be uploaded and accessed through UB Learns

Reading assignments will be given through the semester.

Attendance is critical for this course, since you'll be working with your team during each class.

Grading Policy

Component	Percentage
Presentation #1	10%
Presentation #2	20%
Quiz 1	15%
Mid-term	15%
Project	15%
Class Participation + attendance	5%
Final Exam	20%

Course Schedule & Topics

Weeks 1 - 4: Consulting, business case discovery and delivery of 1st presentation

Weeks 5 - 9: Generative AI, Solution Architecture, Enterprise Transformation

Weeks 10 - 16: Deliver 2nd presentation, build prototype application in OCI, final exam

Week	Topic
1: 8/28	Introduction
2: 9/4	How Companies Work, Discovery
3: 9/11	Consulting Topics, Maturity Assessment
4: 9/18	Quiz , Discovery: open interviews, Lecture
5: 9/25	Presentation - current state, AI maturity
6: 10/2	Lecture + in-class work
7: 10/9	Guest Speaker , Lecture
8: 10/16	Lecture + in-class work
9: 10/23	Lecture + in-class work
10: 10/30	Mid-term
11: 11/6	Presentation - Recommendations, use case, business case
12: 11/13	Lecture + in-class work
13: 11/20	Lecture + in-class work
14: 11/27	Off
15: 12/4	Lecture + in-class work
16: 12/11	Team demos
17: 12/16	Final Exam

Exams:

Exams are essay based and delivered electronically via UB Learns using the Lockdown browser. All exams are to be taken while physically in class.

Grading Policy/Chart:

University grading policy can be found here:

<https://www.buffalo.edu/grad/succeed/current-students/policy-library.html>.

Letter Grade	Points	Letter Grade	Points	Letter Grade	Points
A	94-100 points	B-	80-82 points	D+	65-69 points
A-	90-93 points	C+	77-79 points	D	60-64 points
B+	87-89 points	C	73-76 points	F	< 60 points
B	83-86 points	C-	70-72 points		

When grading presentations and exams, I am looking for understanding and demonstration of key concepts! **You must be able to explain the concepts in this course to a senior leader in a clear, concise, and understandable manner.**

During the course you will deliver an approach and cost model for Acme to adopt Generative AI. Your presentation must show:

- Knowledge and application of course concepts
- Be reasonable in terms of cost and achievability
- Be convincing to “senior leaders” (me)

I will NOT be grading on presentation skills - this is a chance to practice presenting to a large group (a skill that you will need once you graduate)

Course Fees if Applicable

n/a

Academic Integrity

Academic integrity is critical to the learning process. It is your responsibility as a student to complete your work in an honest fashion, upholding the expectations your individual instructors have for you in this regard. The ultimate goal is to ensure that you learn the content in your courses in accordance with UB's academic integrity principles, regardless of whether instruction is in-person or remote. Thank you for upholding your own personal integrity and ensuring UB's tradition of academic excellence. <https://www.buffalo.edu/academic-integrity.html>

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Accessibility Resources

If you have any disability which requires reasonable accommodations to enable you to participate in this course, please contact the Office of Accessibility Resources in 60 Capen Hall, 716-645-2608 and also the instructor of this course during the first week of class. The office will provide you with information and review appropriate arrangements for reasonable accommodations, which can be found on the web at: <http://www.buffalo.edu/studentlife/who-we-are/departments/accessibility.html>.

Technology Recommendations

To effectively participate in this course, regardless of mode of instruction, the University recommends you have access to a Windows or Mac computer with webcam and broadband. Your best opportunity for success in the blended UB course delivery environment (in-person, hybrid, and remote) will require these minimum capabilities listed on the following website:

<https://management.buffalo.edu/current-students/school-facilities/computing-requirements.html>

Public Health Compliance in Classroom setting

Please familiarize yourself with the updated health behavior expectation as indicated in the Student Compliance Policy for COVID-19 Public Health Behavior Expectations (<https://www.buffalo.edu/studentlife/who-we-are/departments/conduct/coronavirus-student-compliance-policy.html>). In addition, please review the updated fall health and safety guidelines.

Diversity and Inclusiveness

Openness and tolerance for diverse perspectives—taking the initiative to try to understand points of view that are different from our own:

Not respecting individual differences (for example culture, gender, sexual orientation, race, religion, disability status, or age) is perceived as intolerant. Not respecting others in general is a negative attribute and detrimental to the class.

Examples of violations: not respecting or facilitating the input of individuals from different cultural backgrounds, making racist, sexist or otherwise insulting or derogatory comments about a class member; bullying a classmate or engaging in any actions that create a hostile learning environment.

Please visit <http://www.buffalo.edu/inclusion/resources/IXResources.html>, which details resources, services, events and support related to equity and inclusion for students.

Course Materials Disclaimer

All materials prepared and/or assigned by me for this course are for the students' educational benefit. Other than for permitted collaborative work, students may not photograph, record, reproduce, transmit, distribute, upload, sell or exchange course materials, without my prior written permission. "Course materials" include, but are not limited to, all instructor-prepared and assigned materials, such as lectures; lecture notes; discussion prompts; study aids; tests and assignments; and presentation materials such as *PowerPoint* slides, or transparencies; and course packets or handouts. Public distribution of such materials may also constitute copyright infringement in violation of federal or state law. Students who violate this policy will be required to complete an educational sanction about the value of intellectual property. More serious and/or repeat violations of this policy may be treated as acts of "academic dishonesty" and/or subject a student to disciplinary charges under the [Student Code of Conduct](#).

Attendance Policy

I expect everyone to attend & participate in class. You will be working in teams each class, so attendance is needed!

Please be on-time!

If you need to miss a class, please email me! Sometimes health or other issues can come up - I understand. Please email me prior to class.

Reference the [university emergency webpage](#) for cancellations/delays due to weather or other unforeseen events.

Instructor and Course Support Staff Information

I'm interested in you being able to discuss the concepts in the course. If you can, you will be a step ahead during interviews and you'll know what to look out for with your next job!

Lab Safety

n/a

Classroom Decorum

I expect everyone to be engaged during class and participate by asking questions and/or contributing to discussions.

Classroom Behavior/Disruption Policies:

<https://www.buffalo.edu/studentlife/life-on-campus/community/rules.html>

Critical Campus Resources

University Support Services

The Center for Excellence in Writing provides support for written work, and several tutoring centers on campus provide academic success support and resources

<https://www.buffalo.edu/writing.html>

Sexual Violence

UB is committed to providing a safe learning environment free of all forms of discrimination and sexual harassment, including sexual assault, domestic and dating violence and stalking. If you have experienced gender-based violence (intimate partner violence, attempted or completed sexual assault, harassment, coercion, stalking, etc.), UB has resources to help. This includes academic accommodations, health and counseling services, housing accommodations, helping with legal protective orders, and assistance with reporting the incident to police or other UB officials if you so choose. Please contact UB's Title IX Coordinator at 716-645-2266 for more information. For confidential assistance, you may also contact a Crisis Services Campus Advocate at 716-796-4399.

Mental Health

As a student you may experience a range of issues that can cause barriers to learning or reduce your ability to participate in daily activities. These might include strained relationships, anxiety, high levels of stress, alcohol/drug problems, feeling down, health concerns, or unwanted sexual experiences. Counseling, Health Services, and Health Promotion are here to help with these or other issues you may experience. You can learn more about these programs and services by contacting:

Counseling Services:

120 Richmond Quad (North Campus), 716-645-2720

202 Michael Hall (South Campus), 716-829-5800

Health Services:

<https://www.buffalo.edu/studentlife/who-we-are/departments/health.html>

716-829-3316

Health Promotion:

114 Student Union (North Campus), 716-645-2837