TECHNOLOGY WITH IMPACT

IE-IMPACT IE-IMPACT SEP-2025 TWI-IE-IMPACT.2.M.G.NOCODE

Area Functional Group - Program Direction

Number of sessions: 15

Academic year: 25-26

Degree course: SECOND

Number of credits: 3.0

Semester: 1º

Category: COMPULSORY

Language: English

Professor: **JON OLEAGA GURIDI**

E-mail: joleaga@faculty.ie.edu

Jon Oleaga is the Academic Director of the Master in Digital Transformation. He is a professor at IE University, where he teaches courses in digital transformation, technology trends, coding, programming, digital marketing, big data and AI. As well as teaching at other universities in Spain and in the United States, he also delivers in-company education and consultancy on Agile methodologies for a wide range of organizations.

Jon has worked in the digital arena and in digital transformation for his entire career. He worked in the digital media industry for over 20 years, with roles in SEO, SEM, social media management and web project management at Vocento (Spain's leading media group), where he was also the head of Spain's leading tech news site at the time. For the last ten years, he has also covered tech news and worked as an advisor for ABC News in Spain.

Jon's entrepreneurial experience includes founding and launching the online reporting tool VisualBox (whose clients included the Red Cross, IKEA, and the United Nations, among others). He remains connected to the startup world, traveling and working with AI companies in Europe, the United States and South America and with Web3 companies, crypto companies, and ICEX.

He holds Bachelor's degrees in Business Administration specialized in Marketing (University of Deusto, Spain) and Psychology (UNED, Spain) and Master's degrees in Marketing Management (University of Deusto) and Psychology (UNED), as well as an Executive MBA (IE University) and a Certificate of Higher Education in Programming and Development. A lifelong learner, he is currently finishing a degree in Anthropology.

Office Hours

Office hours will be on request. Please contact at:

joleaga@faculty.ie.edu

SUBJECT DESCRIPTION

Course Title: Low Code, No Code and Generative AI

Learning Objectives:

- Understand the concept of "no-code" and its relevance in modern technology environments.
- Utilize website builders, web app builders, and mobile app builders effectively to develop digital products without coding.
- Implement best practices for website design, content creation, and digital product design.
- Gain knowledge of automation, robotic process automation (RPA), chatbot design, and generative AI at a foundational level.
- Learn the process of creating and managing databases, integrating payment systems, and using various generative tools to produce innovative digital products.

LEARNING OBJECTIVES

This course aims to educate students on the disruptive technologies that are making an impact on solving some of the world's most pressing social challenges and that are reshaping the way organizations are designed, managed, and executed. The subject covers the latest technological trends and delves deep into the well-rounded analysis of technology, how it is implemented and how it is understood in different generations and cultures. It will focus specifically on how society, organizations and people apply technology. A practical, human-centered approach will be employed, which will help students frame, develop, and discover how technology will help them with their future aspirations and to solve the problems faced by society, organizations, and individuals.

At the end of this course, students will be able to:

- Demonstrate familiarity with the fundamentals of the disruptive technologies discussed in the course.
- Demonstrate knowledge of key technological trends in society, framing the technologies addressed in your course topic – and their latest developments – within them.
- Reflect on how the use of the technologies discussed in the course affects and influences lifestyles, behaviors, and views among different groups of people (i.e. generational differences or other differences in profiles or archetypes of people).
- Present and discuss a use case of how a technology discussed in the course has been or could be applied to solve a specific problem or challenge facing society and apply critical thinking to identify the potential implications of its applications.

    Students will have the opportunity to select their course topic amongst a variety of major subject areas, such as Environmental Sciences; Financial Systems; Health & Technology; Innovation Engineering (Low-Code, No-Code tools); Robotics and Industrial Automation; Sustainable Cities; Technology & Ethics; Technology and Sustainable Development Goals (SDGs); Web, AI & Meta-Intelligence, etc.

TEACHING METHODOLOGY

IE University teaching method is defined by its collaborative, active, and applied nature. Students actively participate in the whole process to build their knowledge and sharpen their skills. Professor's main role is to lead and guide students to achieve the learning objectives of the course. This is done by engaging in a diverse range of teaching techniques and different types of learning activities such as the following:

Learning Activity	**Weighting**	**Estimated time a student should dedicate to prepare for and participate in**
Lectures	13.3 %	10.0 hours
Discussions	13.3 %	10.0 hours
Exercises in class, Asynchronous sessions, Field Work	13.3 %	10.0 hours
Group work	20.0 %	15.0 hours
Individual studying	40.0 %	30.0 hours
TOTAL	100.0 %	75.0 hours

AI POLICY

Critical GenAI use is encouraged

In this course, the use of generative artificial intelligence (GenAI) is encouraged, with the goal of developing an informed critical perspective on potential uses and generated outputs.

However, be aware of the limits of GenAI in its current state of development:

· If you provide minimum effort prompts, you will get low quality results. You will need to refine your prompts to get good outcomes. This will take work.

· Don't take ChatGPT's or any GenAI's output at face value. Assume it is wrong unless you either know the answer or can cross-check it with another source. You are responsible for any errors or omissions. You will be able to validate the outputs of GenAI for topics you understand.

· AI is a tool, but one that you need to acknowledge using. Failure to do so is in violation of academic honesty policies. Acknowledging the use of AI will not impact your grade.

Suggested format to acknowledge the use of generative AI tools:

I acknowledge the use of [AI systems link] to [specify how you used generative AI]. The prompts used include [list of prompts]. The output of these prompts was used to [explain how you used the outputs in your work].

If you have chosen not to include any AI generated content in your assignment, the following disclosure is recommended:

No content generated by AI technologies has been used in this assignment.

If you are in doubt as to whether you are using GenAI tools appropriately in this course, don't hesitate to discuss your situation with your professor.

PROGRAM

SESSION 1 (LIVE IN-PERSON)

Session 1: Introduction

Overview of the course
Introduction to the Program
Introduction to the Group Project
Introduction to no-code tools and platforms
Introduction to artificial intelligence (AI)

SESSION 2 (LIVE IN-PERSON)

Website Creation

Introduction to website builders
Best practices for website design and content creation

SESSION 3 (LIVE IN-PERSON)

Website Creation

Introduction to website builders
Best practices for website design and content creation

SESSION 4 (LIVE IN-PERSON)

Web app and Mobile app Creation

Introduction to web app builders
Creating a web app using Bubble or Adalo
Creating a mobile app using Thunkable or Glide
Best practices for web app and mobile app design and content creation

SESSION 5 (LIVE IN-PERSON)

Web app and Mobile app Creation

Introduction to web app builders
Creating a web app using Bubble or Adalo
Creating a mobile app using Thunkable or Glide
Best practices for web app and mobile app design and content creation

SESSION 6 (LIVE IN-PERSON)

Automation

Automating workflows using Zapier or Make

SESSION 7 (LIVE IN-PERSON)

Automation

Robotic process automation (RPA) using UiPath or Automation Anywhere

SESSION 8 (LIVE IN-PERSON)

Forms

Creating forms using Google Forms or Typeform
Best practices for automation, forms, and databases

SESSION 9 (LIVE IN-PERSON)

Payments

Integrating payment systems using Stripe or PayPal
Best practices for automation, payment, and databases

SESSION 10 (LIVE IN-PERSON)

Databases

Introduction to databases
Creating and managing databases using Airtable or Google Sheets
Best practices for automation, forms, payment, and databases

SESSION 11 (LIVE IN-PERSON)

Chatbots

Introduction to chatbots
Creating a chatbot using ManyChat or Tars
Best practices for chatbot design and implementation

SESSION 12 (LIVE IN-PERSON)

Generative AI - Image Generation

Introduction to generative AI
Generating images using Midjourney

SESSION 13 (LIVE IN-PERSON)

Closed-book Examination

SESSIONS 14 - 15 (LIVE IN-PERSON)

Project presentations

EVALUATION CRITERIA

The minimum passing grade for this course is 5.0.

criteria	percentage	Learning Objectives	Comments
Test	40 %		Closed-books quiz (20%) + Closed-books open-ended case (20%)
Individual Assignments	15 %		Assignments and take home activities

Class Participation	15 %		Pre-class or In-class readings, videos, quizzes, discussion forums and other relevant activities related to class participation and engagement. It must not consider student attendance.
Group Work	30 %		Includes intermediate deliverables, final presentation and peer review

RE-SIT / RE-TAKE POLICY

RE-SIT / RE-TAKE POLICY

Students who must retake this course in the 3rd call must contact the IE Impact Program Management Team to find out if they must attend in person the sessions or not. If it is determined that Retake Students must attend in person the sessions, then the IEU Attendance Policy must be abided by the students.

Each student has four (4) chances to pass any given course distributed over two (2) consecutive academic years. Each academic year consists of two calls: one (1) ordinary call (during the semester when the course is taking place); and one (1) extraordinary call (or "re-sit") in June/July.

Students who do not comply with the attendance requirement in each subject during the semester will automatically fail both calls (ordinary and extraordinary) for that Academic Year and have to re-take the course (i.e., re-enroll) during the next Academic Year.

The Extraordinary Call Evaluation criteria will be subject to the following rules:

- Students failing the course in the ordinary call (during the semester) will have to re-sit evaluation for the course in June / July (except those students who do not comply with the attendance rule, and therefore will not have that opportunity, since they will fail both calls and must directly re-enroll in the course during the next Academic Year)
- It is not permitted to change the format nor the date of the extraordinary call exams or deadlines under any circumstance. All extraordinary call evaluation dates will be announced in advance and must be taken into consideration before planning the summer (e.g. internships, trips, holidays, etc.)
- The June/July re-sit will consist of a comprehensive evaluation of the course. Your final grade for the course will depend on the performance in this exam or evaluation only. I.e., continuous evaluation over the semester (e.g. participation, quizzes, projects and/or other grade components over the semester) will not be taken into consideration on the extraordinary call. Students will have to achieve the minimum passing grade of 5 and the maximum grade will be capped at 8.0 (out of 10.0) – i.e., "notable" in the extraordinary call.
- Re-takers: Students who failed the subject on a previous Academic Year and are now re-enrolled as re-takers in a course will need to check the syllabus of the assigned professor, as well as contact the professor individually, regarding the specific evaluation criteria for them as re-takers in the course during that semester (ordinary call of that Academic Year). The maximum grade that may be obtained as a retaker during the ordinary call (i.e., the 3rd call) is 10.0 (out of 10.0).

After exams and other assessments are graded by the professor (on either the ordinary or extraordinary call), students will have a possibility to attend a review session (whether it be a final exam, a final project, or the final overall grade in a given course). Please be available to attend the session in order to clarify any concerns you might have regarding your grade. Your professor will inform you about the time and place of the review session.

Students failing more than 18 ECTS credits after the June/July re-sits will be asked to leave the Program. Please, make sure to prepare yourself well for the exams in order to pass your failed subjects.

In case you decide to skip the opportunity to re-sit for an exam or evaluation during the June/July extraordinary call, you will need to enroll in that course again for the next Academic Year as a re-taker, and pay the corresponding tuition fees. As you know, students have a total of four (4) allowed calls to pass a given subject or course, in order to remain in the program.

BIBLIOGRAPHY

Recommended

- Dhamani, Numa & Engler, Maggie. (2024). *Introduction to Generative AI.* First Edition. Manning Publications Co.. ISBN 9781633437197 (Digital)

How will the use of GenAI tools impact our society? How large language models (LLMs) work; How to integrate generative AI into workflows; Balancing innovation and responsibility; The social, legal, and policy landscape around generative AI Societal impacts of generative AI; Where AI is going

https://www.manning.com/books/introduction-to-generative-ai

- Marr, Bernard. (2024). *Generative AI in Practice: 100+ Amazing Ways Generative Artificial Intelligence is Changing Business.* First Edition. Wiley. ISBN 9781394245567 (Digital)

Risks and challenges posed by Generative AI; Transformation of the job market in the age of GenAI; AI's transformative impact on education, healthcare, and retail; Potentials in media, design, banking, coding, legal arena

https://www.wiley.com/en-es/Generative+AI+in+Practice%3A+100%2B+Amazing+Ways+Generative+Artificial+Intelligence+is+Changing+Business+and+Society-p-9781394254248

- Cabot, Jordi. (2024). *The low-code handbook.* First Edition. Kindle. ISBN 9789998778504 (Digital)

https://lowcode-book.com/

- Simon, Phil. (2022). *Low-Code/No-Code: Citizen Developers and the Surprising Future of Business Applications.* 2022. Racket Publishing. ISBN 9798985814736 (Digital)

https://www.philsimon.com/books/low-code-no-code/

BEHAVIOR RULES

Please, check the University's Code of Conduct here. The Program Director may provide further indications.

ATTENDANCE POLICY

Please, check the University's Attendance Policy here. The Program Director may provide further indications.

ETHICAL POLICY

Please, check the University's Ethics Code here. The Program Director may provide further indications.