

PROTOTYPING WITH AI: HOW ARTIFICIAL INTELLIGENCE CAN HELP VALIDATE A BUSINESS MODEL

GNAM SNOC 2026

KOZMINSKI UNIVERSITY

Teaching Faculty:

Dr Maciej Madziński (maciej.madzinski@kozminski.edu.pl)

Lecture Time: 20 hours (20 x 45 min.)

Location: Online

Dates: Thursdays 12:00 – 15:15 CET (Central European Time/Warsaw). 4 academic hours per meeting. Proposed dates: March 12, 19, 26; April 2, 16. Workload: around 2 hours of independent work between modules, up to 5 between last two modules.

20 seats will be allocated to students at member schools of the Global Network for Advanced Management (GNAM). GNAM member schools will determine the number of course credits earned. Kozminski University considers this course to be a 4 ECTS, full-semester course.

COURSE OVERVIEW:

This is a **business-first, hands-on** course on how AI transforms product prototyping. We use AI as the engine of **Lean Startup**: shrinking *build–measure–learn* cycles from weeks to days, lowering the cost of experiments, and enabling non-technical teams to reach **validated learning** fast. Designed for managers, product leaders, innovators, and entrepreneurs, the course focuses on value, user outcomes, and decision-making under uncertainty.

Students work across **three pillars**: **(1) ready-made AI tools** for rapid no/low-code experimentation, **(2) AI API platforms** (e.g., OpenAI API) for controlled integrations, and **(3) vibe-coding tools** (e.g., Windsurf) that translate prompts into working UI and glue code. **No prior coding is required** - optional code is welcome. Each module blends concise concepts with guided labs, culminating in a working MVP and a defensible business case that covers value proposition, metrics, costs, risks, etc.

WHO SHOULD TAKE THIS COURSE

Managers, product leaders, innovators, and entrepreneurs who want to prototype real solutions without coding and make faster, lower-risk business bets with AI. This is not a programming course.

COURSE OBJECTIVES

Upon completion of this course, students will understand how AI enables **true Lean Startup** prototyping and will be able to apply it end-to-end - from problem framing to a defended MVP - using ready-made tools, API platforms, and vibe-coding environments. Specifically, they will:

- map business problems to AI solution patterns;
- design AI experiments with clear success metrics and minimal user tests;
- build and iterate prototypes using tools like OpenAI, Vertex AI, and Windsurf;
- integrate basic APIs securely, estimate costs, and instrument prototypes for quality;
- present and defend a working MVP with concise business documentation.

COURSE CONTENT AND SCHEDULE

Session	Topic	Assignment	Reading
Week 1 March 12 th 12:00-15:15 (CET)	AI for Business: foundations & vocabulary. Introduction to business models and basic frameworks. What today's AI does well for prototyping; Limits & safety; How AI compresses the build-measure-learn loop; Framing business problems and success metrics. How AI might be used when working with business models?	Form teams (3–4). 1-pager: problem → user → hypotheses → success metrics.	The Lean Startup, Eric Ries
Week 2 March 19 th 12:00-15:15 (CET)	Lean Startup for AI prototyping. Fast <i>build-measure-learn</i> in business terms; choosing MVP scope; value proposition & risks; minimal user tests that fit a 1-week cadence. Limitations.	Experiment Board: 2–3 testable hypotheses, target users, method, metrics, and success criteria; shortlist 1–2 prototype ideas; prepare user-test script.	The Lean Startup, Eric Ries
Week 3 March 26 th 12:00-15:15 (CET)	Prototyping with ready-made tools. Build a simple assistant or workflow (e.g., assistant in a GPT-style tool or a business flow in n8n/Make/Zapier). Keep the storyline focused on a measurable business outcome.	Mini-MVP v1 (Ready-tool): a working flow that delivers a clear business outcome + ≤2-min demo video. Include a rough cost note (per 100 runs) and the success metric you will track.	Tools documentation.



Week 4 April 2nd 12:00-15:15 (CET)	Vibe-coding build sprint. Turn prompts into UI and glue code in-editor.	Prototype development as homework. Link to the working prototype + 1-page runbook (how to use, business goal, limits, costs, known risks, fallback).	Tools documentation.
Week 5 April 16 th 12:00-15:15 (CET)	Demo Day - prototype defenses. Each team: 15' presentation + 15' Q&A covering value proposition, metrics, costs, risks, compliance; panel feedback; next-step options.	Business & Tech Note (6–8 pages), final prototype package.	-

COURSE VALIDATION: Final project (Prototype package) – 60 pts; Final presentation (Demo Day defense) – 40 pts. Teams work in groups of **3–4**; all module assignments are due **one week after** the related session, and the **final prototype package** is due **one week after** the last session. The **final presentation lasts 15 minutes** followed by **15 minutes of Q&A**.

Explanation: The course is validated by a working **AI-enabled prototype** and its **business defense**. Module assignments serve as milestone inputs into the final prototype but are not separately graded; they must be submitted on time to keep the project on track. **Final submission deadline:** one week after the last session.

Final Project - Prototype Package (60 pts) => working prototype +

1. **Problem & Desired Business Outcome (15 pts)**

Clear problem statement, target user/segment, and the concrete outcome you aim to achieve (e.g., faster lead handling, fewer errors, shorter response time).

2. **Customer Insight & Evidence from Tests (15 pts)**

Who you tested with, what you observed, and what decisions it led to (*pivot or persevere*). Prioritize real quotes, behaviors, and measurable results.

3. **Solution Concept & Way of Working (15 pts)**

Plain-language walkthrough showing how the solution delivers value: key steps, roles (what people do vs. the tool), inputs/outputs, dependencies. Executive-readable, no jargon.

4. **Impact, Economics & Risk (15 pts)**

North Star + 1–2 KPIs with baseline and expected pilot effect; back-of-the-napkin economics (one-off vs. ongoing, cost-to-serve); key risks & compliance (GDPR/IP) and simple safeguards.

Final Presentation - Demo Day Defense (40 pts)

- **Value Proposition & Narrative Clarity (10 pts)** - crisp “who/why/so-what” an executive immediately understands.
- **Evidence & Decision Logic (10 pts)** - what you tested, what you learned, and how that shaped the product.
- **Live Demo Quality (10 pts)** - simple, stable path to value; business-ready storytelling.
- **Executive Q&A & Time Discipline (10 pts)** - precise answers, handling objections, clear trade-offs, on-time finish.

READINGS:

- **Eric Ries - The Lean Startup**
- **David J. Bland & Alex Osterwalder - Testing Business Ideas** (Overview + Experiment Library).
- **Google PAIR - People + AI Guidebook** (selected chapters on prototyping and user value).
- **OpenAI API Docs - Structured Outputs & Function/Tool Calling** (skim key sections).
- **Google Cloud Vertex AI - Gemini API Quickstart + Responsible AI overview** (skim).
- **n8n (or Zapier) - Quickstart** (build a first workflow end-to-end).
- **Windsurf (Codeium) - Getting Started / Editor Overview** (prompt-to-app patterns).

GRADING SCALE

Definition	Kozminski U. grading scale		
	Grade	%	ECTS grade
Excellent, outstanding performance with minor errors.	5.0	100 - 92	A
Very good, above average standard but with some errors.	4.5	91 - 84	B
Good: generally sound work with number of notable errors.	4.0	83 – 76	C
Satisfactory plus: fair, but with number significant shortcomings.	3.5	75 – 68	D
Sufficient: performance meets minimum criteria.	3.0	67 - 60	E
Fail: some more work required before credit can be awarded.	2.0	59 and below	F

BIO OF THE FACULTY

dr Maciej Madziński - Assistant Professor at Kozminski University and a practitioner with 15+ years of experience in strategy, digital transformation (incl. AI). He serves as Academic Director of the **MBA IT** program and teaches management, project management, negotiations, and leadership, where he blends research with real-world transformation cases. In business, he is a **Partner at Kirov & Partners**, advising executives on strategy execution and data/AI-enabled change. Previously, he was **COO at Laurens Coster** (Data & AI; now part of FOTC), where he coordinated operations and client implementations of AI assistants, process automation, and generative media. He also served as **Vice President at Escola S.A.** (software & digital consulting), **Managing Director for Digital Transformation and Support at KROSS S.A.**, and earlier **COO and IT Director** at Kozminski University. He has held supervisory board roles (Kozminski Business Hub; later Escola S.A.) and co-created KU's **SPEB - School of Professional Business Experts**.

Madziński has led complex transformation programs end-to-end - from crafting digital strategies to implementing systems and managing organizational change-across higher education, ed-tech, manufacturing, and retail. At KROSS he oversaw large SAP and Salesforce initiatives (operations, analytics, CRM, B2B e-commerce) and co-led the corporate strategy process through 2026. As a consultant, trainer, and keynote speaker, he focuses on: digital transformation (incl. AI), strategic and project management (including strategic project portfolios), strategic negotiations, and modern leadership. He has supported public institutions and companies such as the Supreme Audit Office (NIK), Poczta Polska, PZU, Jeronimo Martins, Adamed Pharma, KROSS, Veolia, Cisco, DELL, Totalizator Sportowy, Maspex, DELL, and many others.

He earned his **Ph.D. (2020)** in management at Kozminski University with a dissertation on **project management in teal (self-organizing) organizations**. His current interests extend to **leadership in the AI era**. An advocate of “walk-the-talk” execution, he mentors high-potential leaders and regularly designs executive learning experiences that translate strategy into measurable results.

Contact: maciej.madzinski@kozminski.edu.pl.