Syllabus of Record

Program: CET Prague
Course Code / Title: BUSN 365 AI and the Future of Work: From Automation to Autonomy
Contact Hours: 45
Recommended Credits: 3
Primary Discipline / Suggested Cross Listings: Business / Management, Information Technology
Language of Instruction: English
Prerequisites / Requirements: None

Description

This course examines artificial intelligence (AI) as a transformative force reshaping business, work, and society, comparing its impact with that of the Industrial Revolution. Core business functions, including product development, procurement, operations, marketing, sales, and human resources, are examined in terms of how they are being transformed by AI as systems evolve from task automation to co-pilots and increasingly autonomous workflows. Students examine the ethical and governance challenges of responsible AI use including bias, accountability, transparency, workforce impacts, and regulatory oversight. Through business case analyses and hands-on assignments with examples from Central Europe, students learn to critically evaluate AI-enabled transformation, harness its benefits responsibly, and think critically about and with AI. Going beyond a narrow focus on large language models (LLMs) and prompting, the course considers AI's broader impact on work, organizations, and everyday practices.

Objectives

Through their participation in this course, students will:

- Contextualize AI as a transformative force by drawing parallels to historical disruptions like the Industrial Revolution and identify what's different this time.
- Evaluate opportunities to deploy AI for efficiency gains and new product capabilities
- Analyze the human-AI continuum – from workflow automation to copilots to autonomous agents – and its implications for how work and teams are organized.
- Assess how AI is reshaping core business functions including marketing, operations, and human resources.
- Critique the use of AI across the employee lifecycle, with particular attention to algorithmic bias in hiring and performance management.
- Interpret AI governance frameworks, including the EU AI Act, and their operational implications for firms.

Requirements

Active participation is essential in this course. Students are expected to attend each class and field study course component as outlined in the CET Attendance Policy. Students are expected to read all assigned materials before the relevant class session and come prepared to participate thoughtfully in class discussions. Reading assignments are generally 20 pages per class session. All assignments must be submitted via Canvas unless otherwise noted.

Graded assignments include:

- **Participation**: Students are expected to actively engage in discussions, debates, and in-class activities, demonstrating preparation through readings and thoughtful contributions. Participation emphasizes critical engagement, respectful dialogue, and the ability to connect course concepts to real-world AI developments.

- **Homework:** Select 2 of 4 assignment options: AI Product Brief, Analytical Memo, AI Opportunity Map, or Prompt Engineering Lab Report.
    - AI Product Brief (600 words): Using AI tools, draft a brief for a simple digital product that solves a real problem you've observed. Include: problem statement, target user, AI-powered features, and one ethical consideration.
    - Analytical memo (600 words): Compare the Industrial Revolution's impact on artisan/craft labor to AI's current impact on knowledge work. Use at least two academic or credible sources. Identify two structural parallels and two key differences. Also include lessons learned from the industrial revolution, what can be done better in the AI era.
    - AI Opportunity Map (1 page): Select a company you know or admire. Draw (or describe) where on its value chain AI could add value. Showcase where the company is using AI today, and identify 3-5 opportunity areas, and highlight relevant risks.
    - Prompt Engineering Lab Report (500 words + screenshots): Test three different prompt structures for a business task of your choice. Document what changed in the output and explain why you think the differences occurred.

- **Midterm assignment**: AI Transformation Assessment (1,500 words). Students choose a real company operating in Central Europe and a business function they find compelling, then redesign that function as a human-AI collaborative operation, viewed through the lens of the EU AI Act.

- **Capstone project**: AI Strategy & Governance report. Working in groups of 3-4 students, develop a comprehensive AI strategy playbook for a local operating (Central European) company expanding its AI capabilities across multiple business functions. Students write a 8-10 page (ca. 2,000 words) research paper on a topic determined in consultation with the professor, culminating in a 10–15 minute presentation to the class as if pitching to the company's board, making the case for their strategy.

Grading
The final grade is determined as follows:

Participation	20%
Homework (2 at 10%)	20%
Midterm assignment	30%
Capstone project	30%

- Paper: 20%
- Presentation: 10%

Class Participation Grading Rubric

	A – 90-100% Exemplary	B – 80-89% Proficient	C – 70-79% Developing	D – 60-69% Unacceptable	F – 0-59% Missing
Frequency of class participation	Actively contributes 2+ times per meeting	Actively contributes at least 1 time per meeting	Actively contributes at least half of the time during term	Actively contributes less than half of the time during term	Does not contribute
Quality of class participation*	Contribution is always thoughtful, accurate, and constructive, frequently interacting with peers	Contribution is mostly thoughtful, accurate, and constructive, usually interacting with peers	Contribution is somewhat thoughtful, accurate, and constructive, sometimes interacting with peers	Contribution is rarely thoughtful, accurate, and constructive, rarely interacting with peers	Does not contribute or interact with peers
Level of class preparation	Always fully prepared and on task	Mostly prepared and on task	Somewhat prepared and on task	Rarely prepared and on task	Consistently unprepared and not on task

Readings / Resources

Brandão, A. (2025) The Impact of Artificial Intelligence on Modern Society. *AI*, 6(8), 190.

Brynjolfsson, E., Li, D., & Raymond, L. R. (2025). Generative AI at work. *The Quarterly Journal of Economics, 140*(2), 889–942.

International Labour Organization. (2025). *Generative AI and jobs: A refined global index of occupational exposure*. ILO Working Paper.

The State of AI in Product Management. CB Insights. https://www.cbinsights.com/research/report/

World Economic Forum. (2026) The future of jobs.

Content

Topic 1 – What Is AI, and Why Does It Matter Now – the European and Global Context

- Introduction and course overview
- Where AI exists in daily life
- Comparing AI-driven changes in knowledge work with the Industrial Revolution's effects on artisan, craft, and manual labour
- Similarities and differences between mechanization in the Industrial Revolution and automation/autonomy in the AI era
- Historical lessons from the Industrial Revolution, specifically in the Central European context

Topic 2 – AI and the Organization: Strategic Frameworks

- Three lenses for AI opportunities: efficiency gains, new product capabilities, and new business models
- Distinguishing high-impact opportunities from "AI for the sake of AI"?
- Why most AI initiatives fail, and what the successful ones have in common
- Asking the right questions before approving an AI project
- Discussion on leading European Industrial players (e.g. ABB, Siemens, Schneider Electric) and their strategic positioning in the AI boom

Topic 3 – Human-AI Continuum

- From workflow automation to copilots to autonomous agents, and its implications for how work is organized
- The shifting role of the human: from doer, to reviewer, to supervisor, to agent builder - and the skills each role demands
- Implications for team structure, hiring, and job design as more work shifts rightward on the continuum

Topic 4 – AI as Copilot: Augmentation and the Knowledge Worker

- The "copilot" paradigm and how it differs from full automation on a task-by-task basis
- The risk of cognitive deskilling and dependency in AI-augmented work
- What "AI-literate" actually means for an individual knowledge worker
- From assistant to colleague: the evolving human-AI partnership
- Case study and discussion on start-ups deploying AI employees, e.g. European start-up Viktor (HQ Warsaw, Poland)

Topic 5 – AI in Product Development

- Mapping AI tools to each stage of the product development lifecycle, from discovery to launch
- How AI is changing the roles of product managers, designers, and engineers
- Designing a responsible AI-augmented workflow for a hypothetical product team
- Risks of AI in product development: speed without judgment, prototype-to-production gaps, and over-reliance on AI-generated work

Topic 6 – AI in Operations, Supply Chain, and Procurement

- The role of AI in demand forecasting, inventory optimization, and logistics routing
- Supply chain resilience through the lens of AI-enabled risk sensing
- Identifying the human roles that remain critical when operations are highly automated
- Examine industrial AI in European manufacturing, with focus on Czech automotive production and its suppliers

Topic 7 – AI in Marketing and Sales

- AI-driven sales tools (CRM intelligence, lead scoring, conversational AI) and their impact on sales team structure
- Distinguishing between ethical personalization and manipulative targeting

- Applying GDPR and data privacy principles to an AI marketing use case
- Case study and discussion on Klarna (HQ: Stockholm, Sweden): Agentic Commerce, Customer Service & Marketing

Topic 8 – AI in Human Resources: Hiring, Performance, and the Future of Work

- When algorithms manage people
- Mapping AI tools across the employee lifecycle and evaluating their claimed benefits
- Documented cases of algorithmic bias in hiring and performance management
- The manager's responsibility when AI is in the loop on people decisions
- Understand changing recruitment expectations, labor productivity and impact on wages among European employers

Topic 9 – AI Governance, Regulation, and the Policy Landscape in Central Europe

- Key provisions of the EU AI Act and its risk-based classification approach
- Comparing regulatory approaches across the EU vs. US on three dimensions: risk framing, enforcement, and innovation impact
- Examine responsibility, transparency, and trust under the EU AI Act, (including implications for global companies operating in Europe)

Field study and experiential learning components may include:

- Guest speakers
    - Dr. Aditya Rajagopal: AI Human-AI Continuum, or AI in Marketing and Sales
    - Hajo Libor: “Trust, Accountability and the EU AI Act”
- Company visit - Accenture Prague

Syllabus of Record is subject to minor changes in Term-specific Syllabus at faculty’s discretion.