

Syllabus of Module

6. Technology Management

Lecturer: Ing. Jakub Antoň, MBA

Module Annotation

The Technology Management module focuses on the crucial role that technology plays in modern industry and the strategic management of technological innovations within organizations. The objective of this module is to familiarize students with both the theoretical foundations and practical tools necessary for effectively managing technological processes, investments, and innovations in companies. The module covers a broad range of topics, including an overview of modern technologies, analysis of current trends and innovations, evaluation of technological investments, and assessment of risks associated with technological changes.

In addition to these areas, the module introduces key aspects of facility management, which involves the efficient management of physical spaces, equipment, and infrastructure, as well as energy management, which focuses on optimizing energy consumption within organizations. Students will learn about tools for managing and ensuring the sustainable operation of technical systems and equipment in enterprises.

Module Objective

- Students will become acquainted with the key stages of technology development and their impact on the growth of economies and industries.
- The module will provide an overview of current technological innovations and their applications in various business sectors, including digitalization, artificial intelligence, and IoT.
- Students will learn different approaches to implementing modern technologies and trends in companies.
- Students will be introduced to methods for simulating the implementation of new technologies in organizations, helping them understand how to estimate impacts and identify key risks and opportunities during the implementation phase.
- The module will provide tools for evaluating the return on technological investments. Students will learn how to analyze the financial aspects of investments in new technologies and equipment and make decisions regarding their economic efficiency.
- Students will gain an overview of current trends in facility management, focusing on the efficient management of technical equipment, energy management, and a sustainable approach to technology management.

Literature

- 1. BELL, Daniel. *The Coming of Post-Industrial Society: A Venture in Social Forecasting*. New York: Basic Books, 1999. ISBN: 0465097138.
- 2. COURTNEY, Hugh. 20/20 Foresight: Crafting Strategy in an Uncertain World, Boston: Harvard Business School Press, 2001. Michael Raynor, The Strategy Paradox, New York: Doubleday, 2007. ISBN 0385516223.
- 3. HILL, Charles and ROTHAERMEL Frank. "The Performance of Incumbent Firms in the Face of Radical Technological Innovation," Academy of Management Review 28.2 (2003): 257-274. ISBN 0133996220
- 4. MARCUS, Alfred. Management Strategy, 2nd ed. New York: McGraw Hill, 2011. ISBN 978-0078137129.
- 5. MARCUS, Alfred. Strategic Foresight: A New Look at Scenarios. New York: Palgrave MacMillan, 2009. ISBN 978-0-230-61172-6
- 6. PORTER, Michael. Competitive Strategy: Technique for Analyzing Industries and Competitors, New York: The Free Press, 1998. ISBN 068484148.
- 7. SCHUMPETER, Joseph. Capitalism, Socialism, and Democracy. New York and London: Harper & Brothers Publishers, 1947. ISBN 978-0-06-156151-0.







□ + 420 603 836 740 **** www.esbm.cz

