



Financial analysis and management in construction company

Specific requirements on accounting, financial statements and construction industry specific standards according IAS/GAAP, percentage method of revenue and profit recognition.

Cash flow analysis

Profitability, liquidity, debt and trend analysis. Cash flow analysis.

Risk management in construction company

RM Strategies, insurance for builders' practice, bonding as limitation factor of company growth, bonding in construction project practice.

Risk Management Systems for construction projects

Classification of risk in civil engineering contracts, mitigation of risk, RM systems in industry practice.

Project management systems applied in construction contracting

Principles of project management for construction, project organization, methods and tools, specifics of construction company project management.

Advanced systems of construction project management

Procurement systems, contract types, advanced systems of construction project management.

Standard contracts in civil engineering

FIDIC types of standard contract, Red Book, Yellow Book and White Book.

Large contracts in civil engineering

Specialty of FIDIC application for large contracts, highways, bridges, plants.

Production and Operation

Strategy and competition; forecasting; Inventory control; Supply chain management; Push and pull production control systems; Operations scheduling; Project scheduling; Quality and assurance.

Integrated Design and Production

Application of total integration techniques (BIM).

Entrepreneurship

Definition and history; Innovation; Ethics.

Entrepreneurial venture plan

Opportunity assessment; Feasibility plan.

Entrepreneurial issues for start-up

Legal forms of entrepreneurial organizations; Legal environment; Financial sources

Recommended or required reading Planned learning	 Schaufelberger, J., "Construction Business Management", Pearson, 2009. Yescombe, E.R.,: "Principles of Project Finance", Academic Press, San Diego, 2002. Clough R.H., Sears G.A., & Sears, S.K., "Construction contracting: A practical guide to company management", Hoboken, NJ: John Wiley and Sons Inc, 2005. Civitello A.M., Levy S.: Construction Operations Manual of Policies and Procedures, 4rd edition, McGraw-Hill, New York, 2005, 480 p. Langford D., Male S.: Strategic Management in Construction, 2nd Edition. Blackwell Science, 2005. Seely, I.H., "Building Economics", 4th edition, Palgrave – McMillan, 1996 Kuratko, D.F., Hodgetts, R.M., "Entrepreneurship: theory, process, practice", Thompson, 2007. Nahmias, S., "Production and Operation Analysis", 5th edition, McGraw-Hill International, 2005. The frontal lectures of the course are held in modules. These
activities and teaching methods	lectures are organized in theoretical lectures and tutorials. In between these concentrated weeks, projects are assigned to the students as well as computational work.
Assessment methods and criteria	The assessment consists of a final oral exam only after having completed all the project assignments and the final project, which have to be brought at the exam. The final assignment has to be delivered within two weeks after the end of the course. All the project assignments must be approved by the tutor. Grading system. Passed or not passed.
Language of instruction	English
