



FACULTY OF APPLIED SCIENCES

UNIVERSITY OF WEST
BOHEMIA

SITUATED IN THE MIDDLE OF EUROPE
PILSEN – THE CZECH REPUBLIC

EUROPEAN CAPITAL OF
CULTURE 2015

AMONG THE TOP 10
SAFEST COUNTRIES
IN THE WORLD

SMART CAMPUS

Bachelor study

PROGRAMES:

- Mathematics and its Applications
- Mathematics and Financial Studies
- Computer Science and Engineering
- Cybernetics and Control Engineering
 - Automatic Control and Robotics
 - Artificial Intelligence and Automation
- Applied and Engineering Physics
- Geomatics
- Civil Engineering - Building Constructions
- Land Use Planning
- Information Systems
- Computer Modelling in Mechanics

CRITERIA:

- Have a secondary education accepted in the Czech Republic (nostrification)
- Know the Czech language (level B1 according to CEFR)
- Meet admission criteria (provide study results)
- Apply for the study before the end of March
- Pay a fee (500 CZK, approx. 20 EUR)

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in the heart of Europe.**

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Mathematics

The doctoral study is focused particularly on the following research areas: study of qualitative properties of nonlinear differential equations; formulation of nonlinear mathematical models on time scales and their analysis; study of nonlinear eigenvalue problems; bifurcations of solutions of nonlinear systems; development and analysis of numerical methods for fluid dynamics; effective methods of algebraic geometry for applications; symbolic-numerical computations in geometric modelling; study of the properties of discrete structures and their mutual relations; study of graph operators.

Computer Science and Engineering

The doctoral study programme is focused on scientific research and individual creative work in the field of computer science, computer engineering, and information technologies. The study is focused particularly on the following research areas: Methods for development of distributed and embedded systems; Models and methods for development of reliable modular software systems; Intelligent methods for data processing; Methods for the representation of graphical information.

Cybernetics

The doctoral study is focused on the following research areas: methods for optimal and adaptive decision-making systems and fault detection, methods of robust industrial process control and tuning of industrial controllers, artificial intelligence, i.e. speech and image processing technologies, voice dialogue systems, knowledge-based decision-making methods, modelling, simulation and control of power distribution networks.

Plasma Physics and Physics of Thin Films

The doctoral study is aimed at the solution of fundamental problems in discharge plasma physics, plasma chemistry, surface physics and engineering, and physics of thin films, which arise from the formation and investigation of a new generation of thin film materials with unique physical and functional properties. These materials (particularly amorphous and nanostructured nitrides and oxides) are prepared by unconventional processes in discharge plasmas of various types.

Geomatics

PhD. candidates of the doctoral program Geomatics are profiled into the field of mathematical and physical geodesy, geodetic controls and satellite navigation, geodynamics and data modelling, visualization in cartography and geoinformatics with the emphasis on web-based applications. The program is related to other disciplines such as mathematical statistics, numerical modelling, graph theory, theory of information and complexity, applications of geometry and computer-aided graphics.

Applied Mechanics

The doctoral study is focused on scientific research and creativity in various branches of mechanics of solid and flexible bodies and continua. Doctoral students gain a more profound knowledge especially in the analysis of motion, stress and strain, durability and failure prediction of mechanical and biomechanical systems subjected to static, thermal and dynamic loading. For solving these problems they use analytic, numerical and experimental methods.

**FACULTY OF APPLIED
SCIENCES**

UNIVERSITY OF WEST BOHEMIA

DOCTORAL STUDY



CONTACT US



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EXCELLENT RESEARCH

MODERN BUILDING WITH EUROPEAN
RESEARCH CENTER OF EXCELLENCE NTIS

ATTRACTIVE SCHOLARSHIPS