



**Technical University of Zielona Góra
Poland**

TECHNICAL UNIVERSITY OF ZIELONA GÓRA

POLITECHNIKA ZIELONOGÓRSKA
Dział d/s Nauki



GENERAL INFORMATION

2000

TECHNICAL UNIVERSITY PRESS, ZIELONA GÓRA, POLAND

Technical University of Zielona Góra

Original Polish name

Politechnika Zielonogórska

Foundation date: 1965

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WWW pages: www.pz.zgora.pl

Authorities of the University

Rector

Prof. Michał Kisielewicz

Pro-Rector for Scientific

Research and Development

Prof. Józef Korbicz

Pro-Rector for Education

Prof. Ferdynand Romankiewicz

Managing Director

Mr Andrzej Rybicki

History

The University's origins date from 1965 when the Higher College of Engineering was founded in Zielona Góra. It responded to the needs of the citizens of the Lubusky region who wanted their own technical university to train and educate the people who would create and manage the industry of the area. At the beginning, the college had only one faculty which was soon divided into two separate ones: Electrical Engineering and Mechanical Engineering. After three years, the Faculty of Civil Engineering was added. In 1974 the Institute of Social and Economic Sciences initiated a new engineering discipline: industrial organisation and management. The academic year 1974/75 brought more changes: students on each faculty followed a new syllabus based on uniform five-year M.Sc. degree programmes. In 1987 the Faculty of Fundamental Technological Research was established. The German Language and Culture Centre was organised in 1994.

The continuous development of the scientific community and the resulting high-quality research, along with the rapid development of faculties, the introduction of modern specialities, the building of new facilities, lecture rooms and modern laboratories, as well as computer-based learning and teaching, enabled the college to obtain a full academic status and to become the Technical University of Zielona Góra on September 1, 1996.

Today

At present, the University has more than 8,000 students (4,100 of them on intramural courses) in 7 different subject areas and 25 specialities. The students can choose from among many kinds of courses on various levels: vocational, graduate, complementary and post-graduate, which can be completed either intramurally or extramurally.

The University has four faculties which comprise institutes and departments. All the faculties have the right to confer Ph.D. degrees. The University employs more than 440 members of academic staff, including 84 full professors and professors. The research fields correspond, in general, to the areas of study.

The University library has a large number of Polish and foreign publications from numerous areas of technology and provides ample space for private study. The Department of Foreign Languages has a modern and well-equipped building and offers courses in English, German, French and Russian.

Cosy classrooms are equipped with modern multimedia facilities. The University Sports Centre provides the largest general-purpose sports hall in the region, where several international events have been successfully held. Furthermore, a sauna, a fitness room and a weights room are available.

The University has the advantage that all faculties are on one campus which is virtually traffic-free and very close to the centre of the town. The only facility outside the campus is the horse-riding centre in Raculka near Zielona Góra, which offers horse-riding therapy and horse-riding training.

Studying in a smaller academic centre is more attractive to a number of candidates because of everyday friendly contacts with professors, the possibility of individualising the courses, round-the-clock access to well-equipped computer laboratories enabling contact with global networks, the availability of accommodation in students hostels and lower costs of living.

Staff

<i>Professors</i>	<i>84</i>	<i>Including 30 full professors</i>
<i>Doctors and senior lecturers</i>	<i>132</i>	
<i>Lecturers (total)</i>	<i>228</i>	
<i>Total staff</i>	<i>440</i>	

Degree schemes offered

<i>Vocational</i>	<i>Post-graduate</i>
<i>Graduate</i>	<i>Doctoral</i>
<i>Complementary</i>	

Diplomas and degrees

Licentiate Diploma (B. A.)
Engineer Diploma (B.Sc.)
Master's Degree (M.Sc.)
Doctor's Degree (Ph.D.)

Number of students – 8,860

Faculty of Civil and Sanitary Engineering

Dean Prof. Henryk Greinert
Address: Podgórna 50, 65-246 Zielona Góra
Phone: (+48 68) 328 26 39
Fax: (+48 68) 32 47 292
E-mail: WBIS@pz.zgora.pl
WWW pages: www.wbis.pz.zgora.pl

The Faculty of Civil and Sanitary Engineering dates back to 1968 when the Faculty of Civil Engineering with the specialization of urban and industrial civil engineering was established.

The Faculty offers graduate (M.Sc. studies), vocational (B.Sc. studies), complementary courses both for full-time intramural and extramural students in the following areas and the corresponding specializations:

- *Civil engineering: building and engineering structures, technology and organization of building engineering, municipal engineering, renovation of buildings and built-up areas;*
- *Environmental engineering: systems of environmental protection, water supply, waste water and sewage treatment.*

There are 1,607 students studying in both the areas of study.

This number comprises:

- *830 students of Civil engineering, including 522 full-time intramural students, and*
- *777 students of Environmental engineering, including 412 full-time intramural students.*

So far 2,683 students have graduated from the Faculty, and in particular 2,114 in Civil engineering and 569 in Environmental engineering.

The Faculty employs 4 full professors, 8 professors and 33 doctors.

In 1987 the Faculty was granted the right to confer Doctor's degrees in Civil engineering.

Major fields of study

*Civil engineering,
Architecture and construction,
Environmental and sanitary engineering*

Courses for students of special needs

Environmental protection

Courses in foreign languages

*Technology and organisation of building engineering,
Environmental protection,
Waste treatment, Water and sewage treatment,
Municipal engineering*

Major research areas:

Civil engineering: *design and construction of industrial buildings, mechanical properties of reinforced and prestressed structures under special conditions, joint-construction technology, geotechnical, geological and geodetic methods for soil evaluation, measurement of translocation and deformation of structures and engineering constructions, analysis of glaciotectionic structures*

Environmental and sanitary engineering: *design of prototype energy-safe family houses, water-treatment and systems of treatment of industrial and municipal waste, protection of water and soil from pollution*

Institutes and Chairs

Name of unit in English:

Institute of Civil Engineering

Name of unit in Polish:

Institut Budownictwa

Address: Podgórna 50, 65-246 Zielona Góra

Phone: (+48 68) 32 82 416,

Fax: (+48 68) 32 47 292

E-mail: IB@pz.zgora.pl

WWW pages: www.ib.pz.zgora.pl

Head: Prof. Tadeusz Biliński

Name of unit in English:

Institute of Environmental Engineering

Name of unit in Polish:

Institut Inżynierii Środowiska

Address: Podgórna 50, 65-246 Zielona Góra

Phone: (+48 68) 32 82 419

Fax: (+48 68) 32 82 406

E-mail: IIS@pz.zgora.pl

WWW pages: www.iis.pz.zgora.pl

Head: Prof. Andrzej Jędrczak

Faculty of Electrical Engineering

Dean: Prof. Jerzy Bolikowski

Address: Podgórna 50, 65-246 Zielona Góra

Phone: (+48 68) 32 82 513, 32 82 633, 32 82 217

Fax: (+48 68) 325 46 15

E-mail: WE@pz.zgora.pl

WWW pages: www.we.pz.zgora.pl

The Faculty of Electrical Engineering was established in 1967 and for 25 years has offered courses only in Electrical engineering.

The Faculty's study programme comprises graduate (M.Sc. studies), vocational (B.Sc. studies), complimentary (continuation of studies for an M.Sc. degree after B.Sc. studies) courses, both for full-time intramural and extramural students in the following subject areas and the corresponding specializations:

- *Electrical engineering: digital measuring systems, power engineering electronics, computerized information systems, computer systems engineering, information systems in electrical power engineering and industrial electronics;*
- *Computer science: computer engineering, software engineering, industrial information systems and information systems in electrical power engineering.*

Altogether there are 2,511 students:

- 817 students of Electrical engineering, including 484 full-time intramural students, and
- 1,694 students of Computer science, including 663 full-time intramural students.

Moreover, post-graduate courses in Computer science have been offered since 1995.

In all, 3,436 students have graduated from the Faculty: 2,290 in Electrical engineering and 1,146 in Computer science.

The Faculty employs 10 full professors, 9 professors and 25 doctors.

In 1996 the Faculty was granted the rights to confer Doctor's degrees in Electrical engineering.

Major fields of study

Electrical engineering: Digital measuring systems,
Power engineering industrial electronics

Computer science: Computer engineering, Software
engineering

Courses for students of special needs

Measurement systems, Programming languages,
Computer networks, Artificial intelligence

Courses in foreign languages

Adaptive control systems, Digital systems, Neural
networks

Major research areas:

Computational intelligence and optimization techniques: neural networks, fuzzy logic, neuro-fuzzy systems, genetic and evolutionary algorithms, applications in control and diagnostic systems, cryptographic applications

Modelling and control systems: distributed parameter systems, sensor location, identification and state estimation, multidimensional (2D, nD) systems, linear repetitive processes

Intelligent measuring instruments: virtual instruments, transducers of electrical and non-electrical quantities, electrical energy quality analyser, automatic test equipment, precise measurement of admittance and voltage

Industrial computer systems: industrial networks, distributed measuring systems, visualisation and expert systems

Modern software and hardware technology: local and global computer networks, industrial applications of computer systems, databases, multimedia

Formal methods of digital system design: design and application of specific integrated circuits (ASIC, FPGA, CPLD), CAD tools for simulation and synthesis, electronic design automation (including VHDL and Verilog), specification and design of digital embedded systems, system level synthesis and hardware-software codesign

Power electronics systems: active and hybrid power quality controllers (filters, compensators and conditioners, AC choppers with PWM, matrix and hybrid AC to AC converters, DSP in power electronics systems, compatibility (electromagnetic and acoustic) of power electronics devices

Automatic control of electrical drives: frequency-controlled induction motor drive systems, dynamic behaviour of frequency converter-fed induction motors under different modes of control, digital signal processing for control systems

Institutes and Chairs

Name of unit in English:

Institute of Robotics and Software Engineering

Name of unit in Polish:

Instytut Robotyki i Inżynierii Oprogramowania

Address: Podgórna 50, 65-246 Zielona Góra

Phone: (+48 68) 32 82 422, 32 47 295

Fax: (+48 68) 32 54 615

E-mail: IRIO@pz.zgora.pl

WWW pages: www.irio.pz.zgora.pl

Head: Prof. Józef Korbicz

Name of unit in English:

Institute of Electrical Metrology

Name of unit in Polish:

Instytut Metrologii Elektrycznej

Address: Podgórna 50, 65-246 Zielona Góra

Phone: (+48 68) 32 82 222

Fax: (+48 68) 32 54 615

E-mail: IME@pz.zgora.pl

WWW pages: www.ime.pz.zgora.pl

Head: Ass. Prof. Wiesław Miczulski

Name of unit in English:

Institute of Industrial Electrical Engineering

Name of unit in Polish:

Instytut Elektrotechniki Przemysłowej

Address: Podgórna 50, 65-246 Zielona Góra

Phone: (+48 68) 32 82 538

Fax: (+48 68) 32 54 615

E-mail: IEP@pz.zgora.pl

Website: <http://www.iep.pz.zgora.pl>

Head: Prof. Ryszard Strzelecki

Name of unit in English:

Institute of Computer Engineering and Electronics

Name of unit in Polish:

Instytut Informatyki i Elektroniki

Address: Podgórna 50, 65-246 Zielona Góra

Phone: (+48 68) 32 82 219

Fax: (+48 68) 32 44 733

E-mail: IIE@pz.zgora.pl

WWW pages: www.iie.pz.zgora.pl

Head: Prof. Marian Adamski

Faculty of Mechanical Engineering

Dean Prof. Ryszard Rohatyński

Address: Prof. Z. Szafrana 2, 65-016 Zielona Góra

Phone: (+48 68) 32 82 514

Fax: (+48 68) 324 55 97

E-mail: WM@pz.zgora.pl

WWW pages: www.wm.pz.zgora.pl

The Faculty of Mechanical Engineering was established in 1967 and at that time offered courses only in Mechanics.

Currently, the Faculty's study programme comprises Mechanics and mechanical engineering, both intramurally and extramurally. Students can choose from among the following specializations: production engineering, automation and organisation of production processes, maintenance and marketing of vehicles, engineering design and management, agriculture engineering, management and marketing in agriculture, vehicle engineering

In October 2000 the Faculty, in co-operation with the Faculty of Fundamental Technological Research, is going to offer courses in Management and production engineering

Altogether, there are 1,338 students of Mechanics and mechanical engineering, including 674 full-time intramural students.

So far, 3,506 students have completed their studies at the Faculty and graduated.

The Faculty employs 7 full professors, 12 professors and 30 doctors. In December 1999 the Faculty was granted the right to confer Doctor's degrees in Machine construction and operation.

Major fields of study

*Mechanical engineering,
Management and production engineering,
Biomedical engineering,
Management and marketing in agriculture*

Courses for students of special needs

*Engineering fluid mechanics, Management and design
of production processes*

Courses in foreign languages

*CAD/CAM systems, Creativity and innovation in
engineering, Engineering design, Vehicle engineering,
Fluid mechanics, Materials engineering, Physics, Solid
state physics, Rheology*

Major research areas:

Physics: *constitution of shares, conceptual foundations
of statistical mechanics and quantum field theory,
electronic structure of solid surfaces (numerical
studies), physical properties of composite materials,
physics of biological cells, solid state physics*

Biomedical engineering: *corrosion and protection of
implant alloys, bone system surgical treatment,
research on structure and process engineering of spine
implants for surgical treatment*

**Design and optimization of machines and
mechanical elements:** *Concurrent engineering, design
of machines and production systems, methodology of
engineering design, optimization of machine elements
and systems*

Mechanics and strengths of materials: mechanics, rheology, mechanics of fluids, mechanics of machines, strength of sandwich structures, theoretical and experimental investigation of stress, strain and fatigue in machine elements

Processing of materials: extractive refining and grain refinement of copper and aluminium alloys, forming and investigating of working surfaces of machine parts, foundry processing theory, plastics processing theory, solidification of metals and alloys, surface processing and surface finish treatment

Production and manufacturing systems: modelling and simulation of automatic production and transportation processes, quality control in manufacturing, positioning and transportation processes

Tribology: Investigation and modification of working conditions for tribology systems, machining knots, slide and rolling bearings, hydraulic systems, toothed gears and others, lubrication theory

Vehicles: design and manufacturing of vehicles, reliability and mean life of vehicles, vehicle operation and exploitation

Institutes and Chairs

Name of unit in English:

Institute of Mechanical Engineering and Vehicles

Name of unit in Polish:

Instytut Budowy Maszyn i Pojazdów

Address: Prof. Z. Szafrana 2, 65-016 Zielona Góra

Phone: (+48 68) 32 82 617

Fax: (+48 68) 32 82 620

E-mail: IBMP@pz.zgora.pl

WWW pages: www.ibmp.pz.zgora.pl

Head: Prof. Franciszek Romanów

Name of unit in English:

Institute of Production Engineering and Materials Science

Name of unit in Polish:

Instytut Inżynierii Produkcji i Materiałoznawstwa

Address: Prof. Z. Szafrana 2, 65-016 Zielona Góra

Phone: (+48 68) 32 82 620, 32 82 380

Fax: (+48 68) 32 82 620

E-mail: IIPM@pz.zgora.pl

WWW pages: www.iipm.pz.zgora.pl

Head: Prof. Ferdynand Romankiewicz

Faculty of Fundamental Technological Research

Dean: Prof. Longin Rybiński

Address: Podgórna 50, 65-246 Zielona Góra

Phone: (+48 68) 32 82 604

Fax: (+48 68) 32 47 448

E-mail: WPPT@pz.zgora.pl

WWW pages: www.wppt.pz.zgora.pl

The Faculty of Fundamental Technological Research was established in 1987. It offers graduate (M.Sc. studies), vocational (B.Sc. studies), and complementary courses both for full-time intramural and extramural students in the following subject areas and the corresponding specializations:

- **Mathematics:** mathematical computer science, industrial mathematics, econometrics, finance and insurance mathematics, teacher's training in computer science and mathematics,
- **Organization and management:** European economic integration, computer science in management, marketing and staff management, finance management, management of small and medium business, environmental and technical infrastructure management, finance and banking, strategic management and marketing, strategic management and finance.

In October 2000 the Faculty is going to offer jointly with the Faculty of Mechanical Engineering a course in Management and production engineering. Furthermore, the Faculty also offers post-graduate courses in Business management organization and Management in school and finance.

Altogether there are 3,404 students:

- 753 students of Mathematics, including 492 full-time intramural students,
- 2,651 students of Management and marketing, including 835 full-time intramural students.

So far 2,356 students have graduated from the Faculty, including 403 in Mathematics and 1,953 in Management and marketing.

The Faculty employs 6 full professors, 27 professors and 28 doctors.

Major fields of study

*Mathematics,
Management and marketing,
Management and production engineering*

Courses for students of special needs

*Computer- aided management, Database security,
Mathematical statistics*

Courses in foreign languages

*Algebra, Quality management, Cryptography,
Controlling, Calculus of variations*

Major research areas:

Mathematics: algebra, graph and hypergraph theory, control and optimization, functional and differential equations and inclusions, informatics and numerical methods, probability and stochastic processes, mathematical statistics

Computer science and management: logistic management, computer-aided management, manufacturing planning and control, database security, automation and robotics, computer integrated manufacturing, technical and patent information

Organisation and management: macroeconomics, business law, finance and banking, pro-ecological management, human resources management, strategic management, intercultural management, organisation of public investments

Institutes and Chairs

Name of unit in English:

Institute of Mathematics

Name of unit in Polish:

Instytut Matematyki

Address: Podgórna 50, 65-246 Zielona Góra

Phone: (+48 68) 32 82 237

Fax: (+48 68) 32 45 597

E-mail: IM@pz.zgora.pl

WWW pages: www.im.zgora.pl

Head: Prof. Mieczysław Borowiecki

Name of unit in English:

Institute of Organisation and Management

Name of unit in Poland:

Instytut Organizacji i Zarządzania

Address: Podgórna 50, 65-246 Zielona Góra

Phone: (+48 68) 32 82 446

Fax: (+48 68) 32 45 597

E-mail: IOZ@pz.zgora.pl

WWW pages: www.ioz.zgora.pl

Head: Prof. Janina Stankiewicz

Name of unit in English:

Institute of Informatics and Management

Name of unit in Polish:

Instytut Informatyki i Zarządzania

Address: Podgórna 50, 65-246 Zielona Góra

Phone: (+48 68) 32 82 273

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E-mail: IIZ@pz.zgora.pl

WWW pages: www.iiz.zgora.pl

Head: Prof. Zbigniew Banaszak

Location of Technical University of Zielona Góra

