



**UNIVERSITY OF PRISHTINA "HASAN PRISHTINA"  
FACULTY OF MECHANICAL ENGINEERING**

**STRATEGIC PLAN, Faculty of Mechanical Engineering**

**2017 - 2022**

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## Mission and Vision of FME

### Mission

The **mission** and of the FME is through use of contemporary teaching methods and equipment's, to enable students to apply their engineering skills in:

- Metal and manufacturing industry,
- Automation of manufacturing processes, control of engineering systems,
- Maintenance of mechanical systems and equipment,
- Implementation of Thermoenergetic and Thermotechnic systems - thermal power stations; heating, cooling, ventilation and air conditioning of premises etc;
- Implementation of renewable energy, clean and alternative sources of energy through advanced technologies,
- Construction and design of machinery components and motor vehicles, robots and Mechatronic systems;
- Management of Industrial facilities, engineering systems, energy production, transportation, etc.
- Planning, building and advancement of road and railway infrastructure to facilitate movement of people and goods always in conjunction with other scientific and engineering disciplines.
- Another activity of the FME is *scientific and professional research in the field of mechanical engineering* which consists of: Finding new ways of manufacturing, patents, repairs, regenerations, overseeing, investment managing, consultations, expertise, new programs, new Technologies, etc.
- Preparation of students for better and faster adaption for the labor market.

### Vision

The philosophies brought forward in the vision of the UPHP are incorporated in the Faculty of Mechanical Engineering vision statement. This vision was created jointly with the Industrial Advisory Board of FME. The vision statement reads:

The vision of the Faculty of Mechanical Engineering is to be regionally, nationally and internationally recognized in providing mechanical engineering education, leading to well qualified engineers who are innovative, immediate contributors to their profession and successful in advanced studies.

## I. Introduction

Date 30 October 1967, as a part of Technical Faculty has started profile Mechanical Engineering and profile of Electro-technics.

From 1 October 1988 Faculty of Mechanical Engineering is an Academic Unit of University of Prishtina "Hasan Prishtina".

FME has accredited 6 Bachelor Study Programs and 5 Master Study Programs.

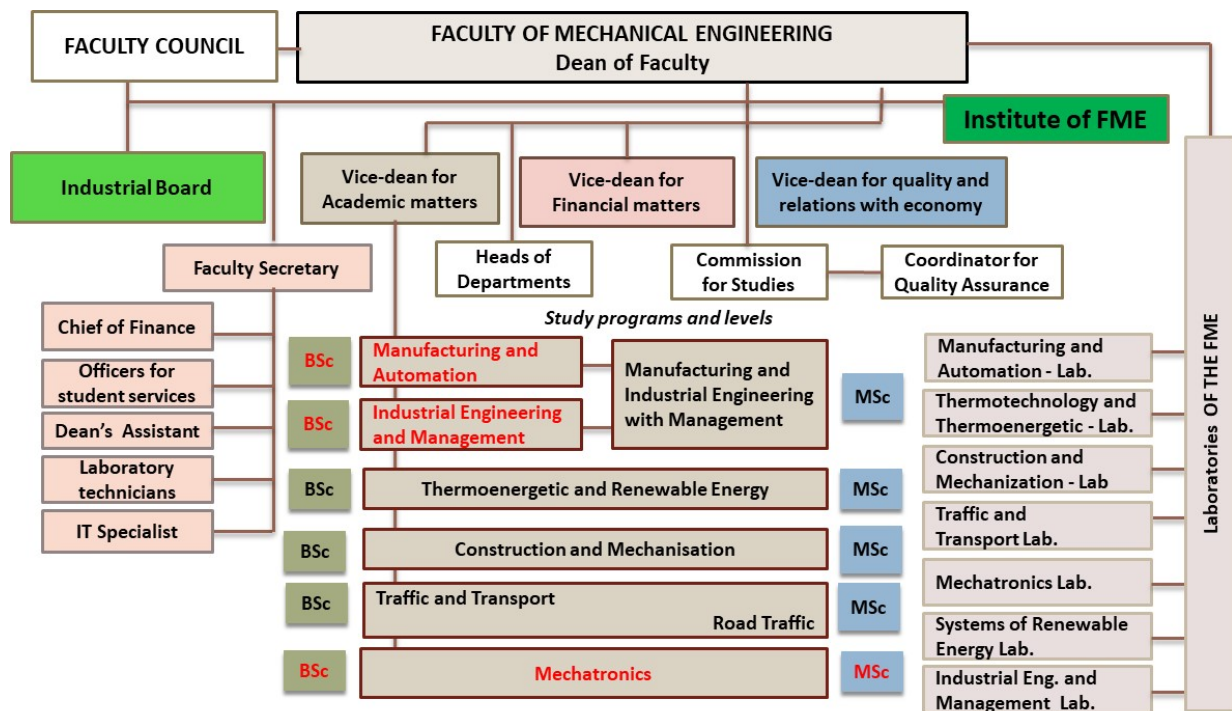
### I.1. Outline of Study Programs

FME has accredited 6 Bachelor Study Programs and 5 Master Study Programs. Study Programs are accredited until 2020, 2022 and 2023.

6 Semesters / 3 years / 180 ECTS		4 Semesters / 2 years / 120 ECTS	
MANUFACTURING AND AUTOMATION	BSc	MANUFACTURING AND INDUSTRIAL ENGINEERING WITH MANAGEMENT	MSc
INDUSTRIAL ENGINEERING AND MANAGEMENT	BSc		
THERMOENERGETICS AND RENEWABLE ENERGY	BSc	THERMOENERGETICS AND RENEWABLE ENERGY	MSc
Construction and Mechanization	BSc	Construction and Mechanization	MSc
TRAFFIC AND TRANSPORT	BSc	ROAD TRAFFIC	MSc
MECHATRONICS	BSc	MECHATRONICS	MSc

Note: As Soon as Possible to apply for accreditation **PhD Studies in Mechanical Engineering**.

## I.2. Organization Chart of the FME



## II. Summary of the current legal framework and other documents

Statute of the University of Prishtina;

Strategic Plan of the University of Prishtina "Hasan Prishtina" 2017 - 2019;

Law on Higher Education of the Republic of Kosovo, 2010;

Kosovo Education Strategic Plan 2017 - 2021;

Regulation on the establishment and principles of functioning of the Advisory Body of the Academic Units of UP, 2015;

Regulation on Quality Assurance and Assessment at the University of Prishtina, 2016;

Regulation on Student Academic Mobility at the University of Prishtina, 2017;

Guide to Reviewing and Reviewing the Syllabus, 2018;

Guide for Student Assessment of Students and their use in UP, 2018;

Strategy for Scientific / Artistic and Development Research Activities 2013 - 2015;

University of Prishtina - Technical Assistance for the Rector's Office, USAID 2013

Report

### **III. Strategic Focus Areas and Strategic Initiatives**

#### **III. 1. Teaching**

The Faculty of Mechanical Engineering is committed to provide more quality teaching. In accordance with current developments in each field in which FME offers studies, will offer:

- Interactive teaching based on dual studies: combination of theory and practices;
- Teaching, which integrates the relevant practical part in accordance with the specifics of the respective study programs;
- Teaching based on markets needs and research projects according to specifications;
- Teaching, integrating learning by doing;
- Teaching based context student in center, moving towards the implementation of best standards.

#### **Changes in ECTS credits**

- Application of ECTS in third year of Bachelor Studies:
- Diploma of bachelor level – 6 credits
- Internship – 4 credits

#### **Diploma based on projects and Internship**

- Practical work is done parallel with approval of diploma work in cooperation with Mentor
- Keeping of Journal of Internship is done before approval of theme at mentor of diploma.

#### **Visits to companies and partner institutions**

- Organized daily visits with students to companies and partner institutions for practical knowledge of work and processes, and information about labor market requirements

#### **Advancement in the methodology of teaching**

- Application of English language in teaching,
- Publishing teaching Literature,
- Application of new professional software,
- Laboratory exercises and advancement of laboratory, equipment,
- Further implementation of projectors, concretization tools,
- Implementation of IT infrastructure in teaching facilities,
- Population of Faculty Library with literature.

### **III.2. FME Values**

*Quality* - We seek to continuously improve the quality of teaching, research and increase staff ability in order to provide the best education opportunity for our students.

*Innovation & Entrepreneurship* - Providing of new teaching methods through innovative approaches to teaching, service, and entrepreneurship.

*Cooperation* - The contribution of everyone is very important. Inter-disciplinary research projects and programs are priority of FME.

*Professionalism* - We value professionalism in teaching and research, as well as we require integrity from our faculty staff and students.

### **III.3. Research and publications**

The Faculty of Mechanical Engineering sees a very important components research and publications of academic staff. The FME will attach particular importance to increase research capacities, resources and technology in the years in view.

FME will:

- Increase international cooperation through research projects, scientific conferences, symposiums, workshops with the participation of academic staff and students.
- Increase cooperation with local institutions such as state institutions, research institutes, public companies, etc.
- Continue with development of the Institute of Mechanical Engineering (IME).
- Investing in laboratories of specific programs;
- Professional accreditation of FME Laboratories.
- Investing in licenses and staff training for adequate professional software's.
- Subscription to electronic databases of bookstores, international journals, etc.
- Publication of monographs, university textbooks, research articles, authorized lectures, manuals and catalogs.

### **III.4. Human Resources**

The FME aims to pursue an active personnel policy based on:

- Recruitment of new academic and administrative staff based on FME needs.

- Continuous professional advancement of regular staff through provision of training, financial and other support.

Currently, FME has in total of 40 full-time academic staffs: nine (9) full professors, eleven (11) associate professors, and ten (10) assistant professors, ten (10) teaching assistants. FME has fourteen (14) administrative staff actually employed.

### III.4.1. Staff Development and Advancement

1. Professor Assistants (5) and Teaching Assistants (2) are employed in 2017, they will start soon regular work.
2. Nine (9) Teaching Assistants that are studying PhD level abroad such as: University of Maribor, University of Nigde (Turkey), University of Bitola “St. Kliment Ohridski” (Macedonia), Polytechnic University in Tirana, Albania.
3. Advancement of professors in a very complex University advancing process, through mobility, post PhD studies, research projects, peer reviewed publications, participation in Conferences, etc.

The planning's for the period 2017-22, academic staff: six (6) professors and 10 teaching assistants. Administrative staff based on our needs are more six (6) workers.

### III. 5. Infrastructure development

The FME currently has:

<b>Teaching Infrastructure</b>	
<b>Teaching space</b>	<b>Unit</b>
Teaching rooms ( m <sup>2</sup> )	13 rooms, 662.7 m <sup>2</sup>
Amphitheatres ( m <sup>2</sup> )	2 Amphitheatres, 497 m <sup>2</sup>
Cabinets ( m <sup>2</sup> )	25 Cabinets , 318 m <sup>2</sup>
Library ( m <sup>2</sup> )	180 m <sup>2</sup>
Laboratory ( m <sup>2</sup> )	10 laboratories, 498 m <sup>2</sup>
Offices ( m <sup>2</sup> )	8 Offices , 241.85 m <sup>2</sup>
Warehouse ( m <sup>2</sup> )	1 Warehouse , 60 m <sup>2</sup>
Etc.	...
<b>Total (m<sup>2</sup>)</b>	<b>3666.67</b>



The FME aims to spaces at building called “Laboratories of Technical Faculties” where FME will refurbish and complete with required equipment’s and devices around 2500 square meters

### **Improvements in teaching Infrastructure**

- Reconstruction of existing teaching and laboratory rooms,
- Adding new laboratory devices and equipment,
- Adding new Computer classrooms,
- Improvement of Faculty Web site for Information, Teaching, Programs and Announcements – <http://fim.uni-pr.edu>
- Preparation of presentation Materials – Flyers, Brochures, Leaflets, etc.
- Separation of University Library from national Library. University Library not fully functional. Its Electronic Library not fully Functional.

## **IV. Cooperation with Economy and Institutions, Employment of graduates**

Based on the feedback from graduated students in BSc and MSc level, we have concluded that their employment in Kosovo is around 85% for Master's and 70% for Bachelor's.

Remaining values do not come as a result of unemployment but more or less from the inability or lack of contact with other graduated students.

We consider that rates of employment are increasing, based on contacts with graduates, businesses and other partner institutions.

### **Cooperation with Economy and Institutions**

#### 1. Engagement of students in:

Collection of statistical data for the needs of Prishtina Municipality,

Collection of statistical data for the needs of Termokos Co.

Internships with Partner Institutions and Companies and Economy

#### 2. Engagement of Academic staff in:

Technical Expertise of equipment, systems and infrastructure of companies and business, through Institute of FME

Commissions for court cases in matters of professional expertise's and super-expertise's in matters of work safety, equipment safety, damages, accidents, failures, etc., through Institute of FME.

Professional Consultations in Engineering matters,

Testing of vehicles,

Mobility of Academic staff, Commissions and projects, etc.

#### 3. Other research's and works carried by FME

- Has compiled research work, innovative projects, executive projects and applied projects;
- Reviewed work carried on other projection enterprises; projected new technological lines, enhanced existing capacities; eliminated manufacturing bottlenecks; automated existing manufacturing lines;
- Technical acceptance of objects, machines or new equipment;
- Has lead and overseen investments and diverse technical work;
- Carried technical inspections (from the point of machinery, equipment and safety at

work, testing of motor vehicles, cables and metal constructions.;

- Issues certificates in relation to official tests carried on motor vehicles and manufacturing machinery (the only licensed institution to carry out these tests in Kosovo),
- Diverse expertise's on road traffic accidents,
- Evaluations and analysis of safety of machines, etc.
- A form of collaboration has been in scientific projects such as: TEMPUS, CEEPUS, ASO, WUS, FP7, HIGHERKOS, ALLED etc.
- MIREC “Metal Industry & Renewable Energy / Cluster of Kosovo, in collaboration with Ministry of Trade and Industry, Metal processing Companies and GIZ & Cluster of Hamburg, Germany.

## V. Financing

Budget of FME in previous three years:

Calendar Year	Budget (€)
2014	158,400.00
2015	183,400.00
2016	583,400.00

Financial Balance in previous three years:

	Salaries (Gross)	Merchandize and services	Institute of FME	Scholarships	Semester discounts
2012	659,789.68	77,113.00	158,240.00	11,900.00	3,000.00
2013	732,597.96	74,408.00	129,580.00	8,100.00	2,600.00
2014	938,981.79	93,559.27	34,020.00	26,100.00	8,300.00
2015	840,100.13	100,100.00	134,480.00	700.00	18,425.00
2016	850,220.10	101,220.00	245,071.00	1,500.00	14,100.00
<b>Total</b>	<b>4,021,689.66</b>	<b>446,400.27</b>	<b>701,411.00</b>	<b>22,200.00</b>	<b>38,125.00</b>

Strategies are to invest more than four (4) million Euros in next five years.

## **VI. Achievements in FME**

### **Interaction between research and teaching in program in evaluation**

- Within the FME, research is conducted in 10 existing laboratories and in collaboration with the economy. These research are published in international scientific journals and as such are planned for implementation in curricula of the respective subjects.
- Research together with partner companies from Industry and Institutions
- Within the FME's external mobility, research of PhD candidates who have studied abroad and still study are planned for implementation in curricula of the respective subjects

**Advisory Council – Body Consisting of FME, Companies and Partner Institutions**, to foster cooperation with economy, and gathering information's about Labor Market requirements, is established on July 2016. More than 25 companies are members.

### **Advancement of Institute of Mechanical Engineering**

Institute operates a very close with other professional and scientific institutes in Kosovo for further fields. The aim of this collaboration has been:

- Compilation of professional and scientific projects in the field of manufacturing machinery, thermo-energy and thermo-technology, constructions through automation and communication;
- Managing of work related to projects mentioned above;
- Development work;
- Applying scientific research findings in practice;
- Verification of theoretical and lab results in practice, etc.
- Helping engineers and technical professionals to find answers to professional problems in the field of manufacturing;
- Mutual professional and scientific development;
- Self funding of activities, more specifically using revenue from faculty lecturers and partners;
- Furnishing labs with new equipment; Establishing research centres;
- Collection of field information on problems faced by economic manufacturing, etc.
- Staff Involvement in research and professional projects inter connecting with the requirements of the economy

## VII. Future Development Plan for the FME

**Strategy of FME consists in improvement and further advancement of Institution in these areas:**

- Advance and development of lecture content of courses,
- Preparation of Msc Level of Study Programs: *Industrial Engineering and Management and Systems of Renewable Energy*
- Fostering international cooperation,
- Mobility to institutions abroad for research. Enhanced and continuous collaboration with European, American and worldwide universities,
- Participation in International projects,
- Reconstruction of new teaching facilities in second Laboratory Object,
- Improvement of current teaching facilities, Infrastructure, Library, and better maintenance,
- Closer communication with students through work groups, consultations or through other means,
- Internship of the students in institutions abroad,
- Purchase of new and Advanced Laboratory and teaching Equipment,
- Planning for Accreditation of PhD studies, based on recommendations of KAA,
- Cooperation with local industrial and business enterprises,
- Urging employment of new young academics that fulfils criteria,
- Urging academic staff for scientific research and English language improvement,
- Urging academic staff for publication of scientific work in per-reviewed journals,
- Improvement of conditions at library, teaching, administrative and other facilities and better maintenance,
- Finding funds for access to on-line libraries of books, journals and other publishing,
- Enriching the library with modern literature and the possibility of connecting with digital libraries of large university centres,
- Collection of field information in relation to the issues faced in the areas of manufacturing, road infrastructure, transport and road safety,
- Faster and reliable open source internet connection at all facilities of faculty building,
- Additional academic and administrative staff based on work load and requirements.
- Focus in increase in quality of teaching and advancement of Curriculums,
- Partnership in projects for reviewing/building new curricula and study programs based on job market.