

Master Mechanical Engineering, "Double Degree with KPI Kyiv"

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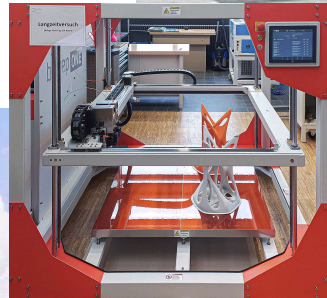
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University of
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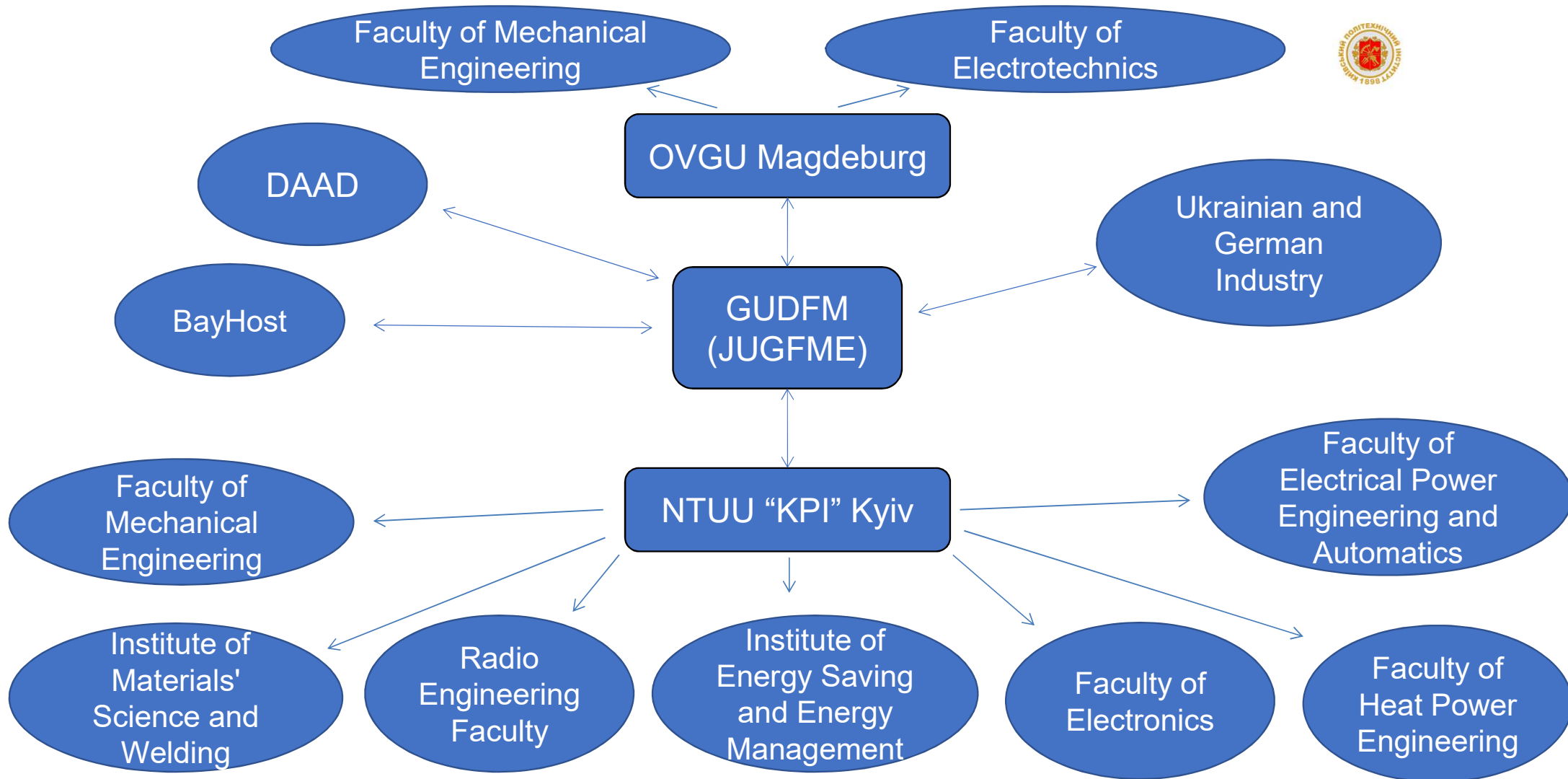
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Existing GUDF (Kyiv) exchange programme with Otto von Guericke University Magdeburg



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Study model of Joint Ukrainian-German Faculty of Mechanical Engineering

Semester	Qualification	Joint Faculty		Cooperation with Magdeburg university
		Specialized teaching	Language teaching	
1.	Bachelor's degree in Kyiv	Study at the base faculties	At JUGFME after special timetable	Provision of textbooks, videoconferences, exams
2.				
3.				
4.				
5.		Specialized lectures in German by JUGFME	10-12 hours a week	Specialized lectures and courses by German professors, internship in Magdeburg
6.				
7.				
8.				
9.	Master's degree in Kiev and Magdeburg	Study in accordance with study regulations of Magdeburg University	Language training through language courses at level B2	Study in Magdeburg according to different disciplines
10.				
11.				
12.				
				Master thesis

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Bachelor's curriculum includes:

- German classes;
- Language internship (after 4th semester);
- Industrial internship (in Germany after 6th semester);
- Teaching German in the technical disciplines:
 - Mechatronics
 - Construction
 - Materials Science
 - Welding and related processes
- Lectures by German professors.

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Advantages of our graduates:

- 2 master's degrees (German and Ukrainian);
- Mastery of modern technology and technologies;
- Knowledge of international standards;
- Language internship in Magdeburg;
- Industrial internship in Germany;
- German language skills at level B2.

SPO Amendment Master Mechanical Engineering, "Double Degree with KPI Kyiv"



University of Applied Sciences (UAS) Hof



Kyiv Polytechnic University (KPI)

1st semester: Basic studies (German)
 Mathematics, experimental engineering/validation, Energy technology, simulation and mechanics



1st semester: Basic studies (German)
 No offer at PTU Kyiv, recognition HS Hof

Specialisation in Hof



2nd semester: Advanced courses at KPI Kyiv (AcK) (Ukrainian)

- AcK3: Technology of Mechanical Engineering
- AcK4: Applied mechanics and mechatronics
- AcK5: Design of machine tools
- AcK6: Aircraft production technologies
- AcK7: Dynamics, strength of machinery and strengthlehre

2nd semester: Advanced courses at UAS Hof (AcH) (German)

- AcH1: Energy Technology
- AcH2: Simulation Technology



Master's thesis in Hof



Master's thesis in Kyiv

3rd semester: Master's thesis
 The Master's thesis is written at UAS Hof or a thesis translated into German or English is submitted from PTU Kyiv for recognition.



3rd semester: Master's thesis
 The Master's thesis is written at PTU Kyiv or a thesis translated into Ukrainian is submitted from UAS Hof for recognition. The thesis must be defended in a colloquium.

Degree: Master of Engineering from HS Hof

Degree: Master of PTU Kyiv

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Hof University of Applied Sciences

Kyiv Polytechnic University (KPI)

PM: compulsory module
WM: Elective module

1st semester: Basic studies (German) (4PM, 1WM)

- Mathematics/Numerics/Matlab
- Experimental Engineering/Validation
- Advanced methods in energy technology
- Simulation and optimization
- *Mechanics of composite materials*
- *Integrated project and product development*

The modules and grades of the UAS Hof are recognised and taken over by the PTU Kyiv

1st semester: Basic studies

No offer at PTU Kyiv, recognition UAS Hof

2nd semester: Advanced courses at the UAS Hof (AcH) (German)

AcH1: Energy Technology (2PM, 3WM)

- Selected renewable energy systems
- Power plant technology
- *Energy storage and load management*
- *Energy law, energy consulting, certification*
- *Energy engineering plant construction*
- *Current trends in energy technology*
- *Project work in energy technology*

AcH2: Simulation Technology (3PM, 2WM)

- FEM
- Multibody simulation
- CFD/Numerical Heat Transport
- *Plastics as a lightweight material in automotive construction*
- *Current trends in simulation*
- *Project work simulation*

Cross-sectional elective modules for AcH 1 and 2:

- *Managing negotiations and contracts*
- *Management of innovation and research projects*
- *Modern Methods of Digital Engineering*
- *International Project*

The modules and grades from the chosen specialisation are recognised and taken over by the partner university.

2nd semester: Advanced courses at KPI Kyiv (AcK) (Ukrainian)

AcK3: Mechanical Engineering Technology (5PM)

- Business Com. and project management
- Programming of CNC machines
- Modelling and analysis of technological processes
- Automat. Design of technolog. Processes
- Automat. Systems for the design of cutting tools

AcK6: Aircraft Production Technologies (5PM)

- Business Com. and Project Management
- Standardisation
- Basics of three-dimensional modelling
- Machining technologies on CNC machines
- Processes for manufacturing products from non-metals

AcK4: Applied Mechanics and Mecharonics (5PM)

- Business Com. and Project Management
- Synthesis of Mechatronic Systems
- Modular Industrial Systems
- Design of mechatronic systems
- Modelling of mechatronic objects

AcK7: Dynamics, Strength of Machines and Strength of Materials (5PM)

- Business Com. and Project Management
- Information technologies by means of CAD programmes
- Statistical dynamics and reliability
- Study of strength of materials and structures
- Strength and destruction of structural elements

AcK5: Machine tool design (5PM)

- Business Com. and Project Management
- Design of processing equipment and robots
- Methods to ensure the performance of machines and robots
- Research and application of additive processes in mechanical engineering
- Automated cutting tool design systems

3rd semester: Master's thesis

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3rd semester: Master's thesis

The Master's thesis is written at UAS Hof or a thesis translated into German or English is submitted from PTU Kyiv for recognition

Degree: Master of Engineering from HS Hof

Degree: Master of PTU Kyiv