

**UNIVERSITY OF SPLIT
UNIVERSITY DEPARTMENT FOR FORENSIC SCIENCES**

**SCIENCE DEVELOPMENT STRATEGY
OF UNIVERSITY DEPARTMENT FOR FORENSIC SCIENCES,
THE UNIVERSITY OF SPLIT
FOR THE PERIOD BETWEEN 2017 AND 2022**

Split, September 2017

1. Introduction

Strategy of scientific development (in further text: Strategy) represents the basic strategic document of the University Department of Forensic Sciences of the University of Split.

For the period 2013 – 2017, Mission, i.e. vision and strategy of the University Department for Forensic Sciences (in further text: Department) was developed, with methodology of SWOT analysis that determines direction of the development of the Department. The results of SWOT analysis show the need for further activities within key areas: study programs, teaching processes, scientific and research activity, international cooperation, improvement of position and work of students, student associations and organizations, as well as promotion of Department business and organization. Reconsideration of key activity areas of the Department in the narrower and broader sense will lead to better positioning and perception of the Department. Department strategy implementation will also imply re-examination of adequacy of the existing organization structure, but also adaptation of strategic goals to the time to come, and is contained in the following documents:

- Mission, vision and strategy of the University Department of Forensic Sciences;
- Scientific strategy of the University of Split;
- Strategy of the University of Split 2025 – 2020;
- Croatian qualifications framework;
- European determinants;
- Strategies of education, science and technology (NN 124/2014);
- European strategy for smart, sustainable and inclusive growth EUROPA 2020;
- Strategic documents of European Research Area (ERA);
- Strategic documents of European Higher Education Area, EHEA;
- Strategies of key European and world universities with which University of Split is developing intensive cooperation such as strategy of Penn State University with which it is developing global strategic partnership;
- Strategies of teaching bases;
- Strategy of smart specialization of the Republic of Croatia for the period 2016 – 2020, and action plan for implementation of the Strategy of smart specialization of the Republic of Croatia for the period 2016 – 2017 (NN 32/2016).

2. Principles and values

University Department for Forensic Sciences aims at education and scientific profiling of experts from interdisciplinary areas of science, i.e. of forensic science. The Department is deeply engaged in establishment of modern study programs and whole life education due to great and constant advances in all areas of science, including the area of forensic sciences, which, due to their interdisciplinary character set even greater requirements to modernization of study programs and continuous whole life education.

Mission, vision and strategy of the University Department for Forensic Sciences is based on development of main area of activity, such as education of students and experts, development of science and cooperation and application of theoretically acquired knowledge in practice.

This study is organized as University graduate study that implements considerable cooperation with other universities and with almost all members of the University of Split

(Faculty of Medicine, Faculty of Economy, Faculty of Law, Faculty of Electrical Engineering, Mechanical Engineering and Naval Architecture, Faculty of Civil Engineering, Faculty of Science, Catholic Faculty of Theology, Faculty of Chemical Technology, University Department for Professional Studies, University Department for Health Studies.) The Department has also signed agreements on cooperation with reputable American universities such as University of New Haven, Penn State University and has cooperation with International Society for Applied Biological Sciences (ISABS) organization. Other cooperation institutions also participate in work and education process of the Department (Security Intelligence Agency, Ministry of Interior of RC, Armed Forces of RC, Forensic Science Center Ivan Vučetić, Tax Administration of RC, County Court of Split, Municipal Court of Split, Commercial Court of Split, Croatian Institute of Public Health, Clinical Hospital Center Split, GENOS ltd., List ltd. Split, UHY HB EKONOM ltd., AD-plastic joint stock company, Solin, Bank of Split etc.

University Department of Forensic Sciences is useful for society and economy since it educates top professionals from the area of forensic sciences on graduate level and implements all the forms of professional work and scientific research according to high criteria of ethics, moral and quality, as well as scientific and academic excellence. A particular quality in student education is a widely developed cooperation with teaching bases, collaborating institutions, economic subjects, as well as numerous external associates which, through top professional work, equip the students with the required knowledge and skills. In this way, interdisciplinary work and rich external cooperation leads to interaction that directly affects implementation quality of study programs and quality of our experts in forensic sciences. University Department of Forensic Sciences is constantly improving its role in building up the society of knowledge, in providing sustainable development, encouragement of scientific excellence, social responsibility, inclusiveness, recognizability and ethics.

One of main strategic goals is taking an even more important place in the development of the forensic sciences, both at the University of Split and in wider social community of the Town of Split, County of Split and Dalmatia, Republic of Croatia, wider region, and European Union.

3. SWOT analysis

Forces:

- Study program conceived in accordance with the demands of the Bologna process
- Scientific specificity of studies – unique in the region
- Dynamic scientific staff, due to young Department
- Very good cooperation with students on all levels
- Abundance and frequency of international contacts and cooperation
- Functioning and efficiency of quality control system
- Internationally recognizable study program
- Distinct interdisciplinarity in scientific research
- International cooperation with eminent American universities
- Potential for establishing interdisciplinary doctoral studies
- Potential for establishing courses and studies in English language
- Potential for development of the whole life education program

- Special capacities for research and teaching laboratories

Weaknesses

- Insufficient number of teachers, considerable engagement of teachers in administrative jobs and lack of time for scientific work
- Insufficient number of projects financed by the Croatian Science Foundation or by European Union (which makes it hard for the young team consisting mostly of assistant professors and assistants to apply for)
- Lack of our own scientific and teaching staff and increased expenses connected to organization of teaching by external associates
- Difficulties in employing the new scientific, teaching and administrative staff.

Threats:

- Moratorium on new working places
- Constant changes and insecurity within the financing system of higher education and science
- Insufficient and/or difficult financing of science by the state, private funds and foundations
- Suboptimal way of financing higher education, encouragement and financing of whole life education
- Limited possibility of employing research and teaching staff.

Circumstances:

- Young and dynamic research and education staff
- Increasing the offer of whole life education
- Starting the on-line study for part-time students
- Supplementing the study program with undergraduate and doctoral studies
- Increasing international cooperation and employee and student mobility
- Increasing cooperation with other members of the University of Split as well as with other higher education institutions in the Republic of Croatia, European Union and the world
- Encouraging mobility and additional investment into development of human and material resources as an opportunity of finding new ways of Department financing from international funds
- Improving cooperation of University Department with home and foreign universities, centers of excellence, scientific communities, as well as links with other scientific areas
- Starting internationally recognizable study programs and different forms of training
- Developing existing laboratories at the Department and establishing the new laboratories
- Connecting laboratories and research teams with economy
- Establishing spin-off firms
- Organizing summer schools, workshops and conferences

4. Mission and vision of the Department

The main activity areas of the University Department of Forensic Sciences are based on the following:

- 1) Education of excellent, highly qualified experts that would work in world and home labour market
- 2) Development of all forms of research and professional work in scientific areas and in the fields connected to forensic sciences
- 3) Planning optimal scientific and professional training and advancement of the young research staff
- 4) Cooperation with other institutions and higher education institutions with the aim of advancing science and education
- 5) Maintaining international and teaching cooperation
- 6) The Department provides the students with the possibility of active participation in Department activities and of testing the theoretical knowledge acquired at this study through practical work in our laboratories or in collaborating institutions.

The students that finished the graduate university study at the University of Split, University Department for Forensic Sciences are recognized in local and international labour markets.

One of strategic goals of vision, mission and strategy of the University Department for Forensic Sciences is creating the scientific development strategy that would help implementation of the following basic goals in the development of the scientific component of the Department:

1. Foundation of research laboratories and their equipment
2. Creating conditions for better quality mentoring work and greater inclusion of foreign scientists into the teaching and mentoring process
3. Encouraging mobility and postdoctoral training
4. Increasing the number of published scientific papers and scientific monographs
5. Increasing the number of domestic and international projects
6. Increasing international cooperation
7. Organizing international and home scientific meetings
8. Defining strategically important research areas in line with international and national strategic priorities
9. Working on science popularization
10. Including the students in scientific research projects
11. Organizing postgraduate study (doctoral) programs in English language
12. Integrating scientific research groups within the Department and within the University

5. Areas of science strategy – strategic goals

5.1. Promotion of study programs

- Revision and modernization of the existing study programs in accordance with the EU defined key competences and occupation standards
- Starting the new study programs (undergraduate and doctoral study)
- Organization of self-financing study programs in English language
- Program update for whole life education
- Starting the distance-learning education

5.2. Promotion of the teaching process

- Revise and modernize the quality evaluation system of the teaching programs and the teaching work
- Develop the system for improvement of teaching competencies of the teachers employed at the Department
- Define and implement learning outcomes on the level of the course, module and study program
- Gradually decrease external cooperation
- Strengthen integration of scientific research work with the teaching processes

5.3. Promotion of scientific and research activity

- Increase the scientist mobility
- Increase international scientific cooperation
- Increase quality and productivity of scientific research work
- Work on science popularization
- Improve support of scientific research work and its subsequent monitoring
- Reward scientific excellence
- Improve research and education laboratories
- Take care of assistants and postdoctoral students
- Strengthen cooperation with public/state sector and economy
- Increase publishing activity of the Department
- Start a specialized forensic journal
- Introduce additional criteria for election to scientific-teaching titles

5.4. Promotion of international cooperation

- Increase outgoing mobility of teaching and non-teaching staff
- Increase outgoing and ingoing mobility of students
- Increase ingoing mobility of scientists and teachers
- Organize and co-organize international meetings, workshops and summer schools with foreign institutions
- Participate in international associations and encourage membership in scientific and professional institutions

5.5. Promotion of student position and work, of student associations and organizations

- Foundation of social network ALUMNI Forensics
- Encouragement of student scientific and professional activities
- Increasing the study quality of disabled persons

5.6. Promotion of Department business and organization

- Provide, according to requirements, additional space for scientific and teaching activities
- Find additional financing sources
- Regularly update the Department network pages
- Strengthen the role of the Department in creation of scientific and professional policy of the Republic of Croatia
- Improve infrastructure
- Increase control quality of resources and administrative support

Elaboration of strategic scientific goals of the University Department for Forensic Sciences for the period 2017-2022

1. strategic goal: promotion of the study programs

Sub-goals	Activities	Results/indicators	Holders	Terms
1.1. Revision and modernization of the programs according to EU defined key competences and occupation standard	Implementation of the occupation standard	Occupation standard entered in HKO	Head, Professional Council, Assistant Heads, Quality Board, Working Groups	6/2019.
	Discussion on study programs	Changing up to 20% of the curriculum	Head, Professional Council, Assistant Heads, Quality Board	continuously
1.2. Starting the new study programs	Starting doctoral studies	Obtaining work permit, implementation of the study programs	Head, Professional Council, Assistant Heads, Quality Board, University, AZVO	2022.
	Starting the undergraduate study	Obtaining work permit, implementation of the study programs	MZO	2022.
	Starting the specialist studies	Obtaining work permit, implementation of the study programs		2022.
1.3. Structure Self-financing of the study programs in English	Discussion regarding study programs in English	Implementing development plan of the study programs	Head, Professional Council, Assistant Heads, Quality Board	2020.
1.4. Program update for whole life education	Discussion on program update for whole life education	Implementing development plan for whole life education	Head, Professional Council, Assistant Heads, Quality Board	2020.
1.5. Starting education via distant learning	Determining minimum demands and standards	Teaching application	Head, Professional Council, Assistant Heads, Quality Board	2018./2019.
	Implementation of teaching materials		Teachers	2018./2019.

2. strategic goal: Promotion of the teaching process

Subgoals	Activities	Results/indicators	Holders	Terms
2.1. Revision and modernization of quality evaluation system of teaching programs and teaching work	Coordinate documentation	Coordination on the University level	Head, Professional Council, Assistant Heads, Professional Council, Quality Improvement Board	continuously
	Introduce regular meetings of the students with management	Meeting minutes		
2.2. Development of the system for competency improvement of teachers employed at the Department	Continuous teacher education – educator education	Number of teacher educations	University (workshops)	continuously
2.3. Definition and implementation of learning outcomes on the level of the course, module and study program	Elaboration and revision of competence based learning outcomes for each course, module, and study program	Implementation of learning outcomes	Head, Assistant Heads, Professional Council, Teachers	2017./2018.
2.4. Gradual reduction of external cooperation	Coordination of implementation plans with personnel development dynamics	Decreased external cooperation for 20%	Head, Professional Council	2022.
2.5. Strengthening integration of scientific research work with teaching processes	Encouraging mobility of teaching personnel	Number of teaching personnel mobility	Head, Assistant Heads, Erasmus coordinator	continuously

3. strategic goal: Promotion of scientific research activity

Subgoals	Activities	Results/Indicators	Holders	Terms
3.1. Increasing scientists mobility	Encouraging mobility via increasing international cooperation	Mobility number of teaching personnel increased by 20 %	Head, Assistant Heads, Erasmus coordinator	2022.
3.2. Increasing international scientific cooperation	Signing the contract on scientific cooperation	Number of signed contracts increased by 20%	Head, Assistant Heads, Department Secretary, Professional Council	2022.
3.3. Increasing quality and productivity of scientific research work	Increasing number of publications	Number of employees' publications increased by 10%	Head, Assistant Heads, Teaching personnel	2022.
	Increasing the number of international projects	Number of projects increased by 100%		
	Increasing the number of applications to EU projects	Project number increased by 20%		
	Supporting organization and participation at international conferences	Number of Conference presentations increased by 25%		
	Encouraging organization of workshops from specific areas of science	Number of organized workshops increased by 50%		

	Encouraging organization of summer schools from specific areas of science	Number of organized summer schools increased by 50%	

3.4. Work on science popularization	Participation at the University Review, Science Festival and similar manifestations	Number of participations increased by 10%	Management, all employees, students	2022.
	Participation in activities dealing with science			
	Organization of popular scientific conferences and lectures			
	Science popularization via media			
3.5. Improvement of monitoring and support of scientific research work	Creating the platform for implementation of the Science Office	Implementing documentation for Science Office	Head, Assistant Heads, Department Secretary, Professional Council	2022.
3.6. Awarding the scientific excellence	Implementation and upgrade of the rulebook on awards and recognitions	Implementation of activities from rulebook, upgraded rulebook	Head, Assistant Heads, Department Secretary, Professional Council	continuously
3.7. Upgrading of scientific and teaching laboratories	Grading of scientific and teaching equipment for corresponding laboratories	Purchasing the new equipment	Laboratory head	continuously
3.8. Taking care of assistants and postdoctoral students	Writing the annual report for assistants	The report adopted by Professional Council	Mentor, Chair Head	continuously
	Providing funds for scientific and professional work	Funds provided	Mentor, Chair Head, Department Head	continuously

	Providing promotion for assistants and postdoctoral students that have obtained a Ph.D.	Open working places for postdoctoral students /assistant professors	Head, University, MZO	continuously
3.9. Strengthening cooperation with public/state sector and economy	Making the offer of services for economy	Offer is set up on network page	Head, Management, employees	2019.
	Starting scientific and professional projects with public sector	Increasing cooperation	Head, Assistant Heads, Teachers	2022.
3.10. Intensifying the Department publishing activities	Encouraging scientific and professional publishing	Published works, 20% increase by 2022	Head, Assistant Heads, Publishing Committee, Teachers	continuously
3.11. Starting the specialized forensic journal	Making the platform for the journal publication	Making documentation for the journal	Head, Assistant Heads, Teachers	2022.
3.12. Introducing additional criteria for election to scientific-teaching titles	Elaboration of additional criteria by areas of science	Making documentation for Professional Council	Head, Assistant Heads, Department Secretary	2018.

4. strategic goal: Promotion of international cooperation

Subgoals	Activities	Results/indicators	Holders	Terms
4.1. Increase outgoing mobility of teaching and non-teaching personnel	Implement yearly mobility plans	Increase outgoing mobility for 30%	Head, Assistant Heads, Teachers, Personnel	2022.
	Work on encouraging personnel mobility			
4.2. Increase outgoing and ingoing student mobility	Provide courses in foreign languages	Number of courses in foreign languages increased by 10%	Head, Assistant Heads, Course holders	2022.
	Organize summer schools	Number of summer schools increased by 50%	Head, Assistant Heads, Course holders	
	Work on encouraging student mobility	Number of outgoing student mobility increased by 20%	Head, Assistant Heads, Erasmus coordinator	
4.3. Increase incoming mobility of scientists and teachers	Provide web materials in English	Number of web materials increased by 20%	Management, Assistant Heads, Course holders	Continuously up to 2022
	Work on Department recognition	Number of questions regarding programs increased by 20%	Head, Assistant Heads, Course holders, Information service, Student service	
4.4. Organize and coorganize international meetings, workshops and summer schools with foreign institutions	Develop inter-institutional cooperation	Number of organized international meetings, workshops and summer schools increased by 20%	Head, Assistant Heads, employees	Continuously, up to 2022
4.5. Participate in international associations and encourage employees to become members of scientific and	Encourage employees to become members of organizations	Number of memberships in international organizations increased by 20%	Management, Assistant Heads, Teaching and non-	Continuously, up to 2022

professional institutions			teaching staff	
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5. Strategic goal : Promotion of student position and work, of student associations and organizations

Subgoals	Activities	Results/indicators	Holders	Terms
5.1. Foundation of social network ALUMNI FORENSICS	Implementation and updating of data base of former students	Data on employments and careers of ALUMNI	Head, Assistant Heads, Association Management, Student Service	continuously
	Development of cooperation with former students	Number of created cooperation's increased by 20% by 2022		
	Inclusion of former students into Department activities			
5.2. Encouraging the student scientific and professional activities	Encourage the student excellence – in the form of awards and recognitions	Award ceremony	Head, Assistant Heads, Award and Recognition Committee	continuously
	Include the students into science popularization projects	Number of students included in science popularization increased by 20% by 2022	Head, Assistant Heads, Teaching staff, Students	continuously
	Encourage implementation of papers by co-mentoring with students	Number of papers published by co-mentoring increased by 20% by 2022	Head, Teaching staff, students	
5.3. Increase quality of study for disabled persons	Individual approach	Study performance	Head, Assistant Head for teaching, Teaching Staff, Student Service	continuously
	Inclusion of disabled students in all the Department processes			

6. Strategic goal: Promotion of the Department business and organization

Subgoals	Activities	Results/indicators	Holders	Terms
6.1. Provide increased space required for scientific and teaching activities according to requirements	Obtain additional space in the existing building	Space obtained	University, Head	continuously, t2022
	Obtain space in the planned building of the Scientific-innovation center			
6.2. Find additional financing sources	Develop the business plan for additional financing sources	Business plan implemented	Head, Assistant Heads, Professional Council	2022
6.3. Regularly update the Department network pages	Updating with all the important data	Visibility and occupancy of internet pages	Information service, Department staff	continuously
6.4. Increasing the Department role in the creation of scientific and professional policy of the Republic of Croatia	Participating in the creation of scientific and professional policy of the Republic of Croatia	Participation number increased by 10%	Management, Teachers	Up to 2020
6.5. Improvement of infrastructure	Making plan for infrastructure improvement	The plan presented to the Professional Council	Head, Assistant Heads, Professional Council	continuously
6.6. Increasing quality of control of resources and administrative support	Improving job systematization	New job systematization	Head, Assistant Heads, Department Secretary, Professional services	continuously
	Implementing the poll for administrative staff	Implemented polls		continuously

	Encouraging mobility of non-teaching staff	Mobility number increased by 20%		Up to 2022
	Organizing the program for professional development of non-teaching staff	Number of implemented programs increased by 20%		Up to 2022

Strategy Development Committee:

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