Doctoral School
Warsaw University of Technology

COURSE OFFERED IN THE DOCTORAL SCHOOL

Code of the course	4606-EW-0000000-0140	Name of the course	Polish	**Podejmowanie decyzji i negocjacje w nauce i biznesie**
			English	**Making Decisions and Negotiations in Science and Business**
Type of the course	Researcher's workshop (*warsztat badacza*)			
Course coordinator	Janusz Marszalec, Ph.D. (Eng.), MBA			
Implementing unit		Scientific discipline / disciplines*		

Level of education	Doctoral Program	Semester	Winter ~~and summer~~ semesters		
Language of the course	English				
Type of assessment:	Credit with grade	Number of hours in a semester	30	ECTS credits	2
Minimum number of participants	10	Maximum number of participants	30	Available for students (BSc, MSc)	No

Type of classes		Lecture	Auditory classes	Project classes	Laboratory	Seminar
Number of hours	in a week	3		3		
	in a semester	21		9		

* does not apply to the Researcher's Workshop

1. Prerequisites

There are no prerequisites.

2. Course objectives

1. Learning and understanding the principles of making decisions in a proactive, organized, methodical and repeatable way, leading to making better choices.
2. Learning and understanding the PrOACT methodology taking into account the stages in decision making process such as formulating the decision problem, objectives of the decision, possible alternatives and their consequences, as well as taking into account the elements of uncertainty and personal risk-taking in the decision making process.
3. Learning and understanding the principles of making linked decisions, when the current decision has a significant impact on decisions that will be made in the future.
4. Understanding psychological traps while making decisions and how to avoid them or reduce their impact on making decisions.
5. Learning and understanding various negotiations methods and techniques for negotiations with different partners to better achieve objectives.

3. Course content (separate for each type of classes)

Lecture

1. Making Smart Choices – How to think about the whole decision problem and use proactive approach in making decisions.
2. Problem – How to define a decision problem to solve the right problem.
3. Objectives – How to clarify what you are really trying to achieve with your decision.
4. Alternatives – How to make better choices by creating better alternatives to choose from.
5. Consequences – How to describe how well each alternative meets you objectives.

6. Tradeoffs – How to make tough compromises when you can't achieve all your objectives at once.
7. Uncertainty – How to think about and act on uncertainties affecting your decision.
8. Risk Tolerance – How to account for your appetite for risk.
9. Linked Decisions – How to plan ahead by effectively coordinating current and future decisions.
10. Psychological Traps – How to avoid some of the tricks your mind can play on you when you are deciding.
11. Getting to YES with Yourself – Harvard Negotiation Project Method.
12. Getting to YES – Negotiating Agreement Without Giving In, Harvard Negotiation Project Method.
13. Getting Past NO – Harvard Negotiations Project Method.
14. Start with NO – Why WIN-WIN is Sometimes a Wrong Approach.
15. Never Split the Difference – FBI Negotiator Strategy.
16. 3-D Negotiations – Design the Game in Your Favour Before You Start.
17. Students' projects presentations.

Project classes

In the project the decision background information should be presented, and then a decision problem should be formulated and a decision should be made following the PrOACT method (objectives should be defined, alternatives should creatively be formulated, consequences and tradeoffs should be analysed, evaluated, and inferior alternatives elminated. and uncertainty issues, personal risk tolerance and linked decisions should be considered). Issues related to psychological traps, implementation of the decision and monitoring of the results should also be addressed.

4. Learning outcomes

	Learning outcomes description	Reference to the learning outcomes of the WUT DS	Learning outcomes verification methods*
Knowledge			
K01	Gaining knowledge on transferring knowledge to economic and social sphere, and on commercialisation of results of scientific research	SD_W5	Assessment of activity during classes
K02	Gaining knowledge about the economic and legal determinants of scientific and research activity	SD_W4	Assessment of activity during classes
K03	Gaining knowledge on the effective management of the research process and the commercialisation process, as well as the effective use of funds for financing scientific research	SD_W4	Assessment of activity during classes
Skills			
S01	The ability to correctly infer on the basis of scientific research results and to make decisions about the directions of further research, and the ways of using them	SD_U1	Assessment of activity during classes
S02	Ability to plan and implement individual and team research, development and creative projects, also in an international environment	SD_U7	Assessment of activity during classes
S03	Independent planning and acting for one's own development, as well as inspiring and organising development of other people	SD_U8	Assessment of activity during classes

Social competences			
SC01	Understanding the importance of knowledge and scientific achievements in solving cognitive and practical problems	SD_K2	Assessment of activity during classes
SC02	Thinking and acting in innovative and entrepreneurial way	SD_K4	Assessment of activity during classes
SC03	Behaving in professional manner, developing the ethos of scientific and research communities and presenting their importance to society	SD_K5	Assessment of activity during classes

*Allowed learning outcomes verification methods: exam; oral exam; written test; oral test; project evaluation; report evaluation; presentation evaluation; active participation during classes; homework; tests

5. Assessment criteria

Credit with a grade on the basis of attendance (80% attendance required), activity during classes (including analysis of various cases) and execution of the final project. Presentation of the final project is followed by Q&A session.

6. Literature

1. Clemen, Robert T., *Making Hard Decisions*, Duxburry, Pacific Grove, California, 2001.
2. John S. Hammond, Ralph L. Keeney, and Howard Raiffa, *Smart Choices: A Practical Guide to Making Better Decisions*, Harvard Business Review Press, 2015.
3. Keeney, Ralph L., *Value-Focused Thinking*, Harvard University Press, Cambridge, Massachusetts, 1992.
4. Ray Dalio, *Principles: Life and Work*, Simon&Schuster, 2017
5. Malcolm Gladwell, *Blink: The Power of Thinking Without Thinking*, Back Bay Books, 2007.
6. Barry Schwartz, *The Paradox of Choice: Why More Is Less*, Ecco, 2016.
7. Roger Fisher, William L. Ury, Bruce Patton, *Getting to Yes: Negotiating Agreement Without Giving In*, Penguin Publishing Group; 3rd Revised edition, 2011.
8. William L. Ury, *Getting to Yes with Yourself: (And Other Worthy Opponents)*, HarperOne, 2016.
9. Jim Camp, *Start with NO...The Negotiating Tools that the Pros Don't Want You to Know*, Currency, 2002.
10. Chris Voss, Tahl Raz, *Never Split the Difference: Negotiating As If Your Life Depended On It*, Harper Business, 2016.
11. Robert B. Cialdini, *Influence, New and Expanded: The Psychology of Persuasion*, Harper Business, 2021.

7. PhD student's workload necessary to achieve the learning outcomes**

No.	Description	Number of hours
1	Hours of scheduled instruction given by the academic teacher in the classroom	30
2	Hours of consultations with the academic teacher, exams, tests, etc.	5
3	Amount of time devoted to the preparation for classes, preparation of presentations, reports, projects, homework	15
4	Amount of time devoted to the preparation for exams, test, assessments	10
	Total number of hours	**60**
	ECTS credits	**2**

** 1 ECTS = 25-30 hours of the PhD students work (2 ECTS = 60 hours; 4 ECTS = 110 hours, etc.)