

1. BASIC BIOGRAPHICAL INFORMATION



Full Name: Omer Kurtanović

Date and Place of Birth: January 14, 1959, Sjenica

E-mail: omer.kurtanović@fmpe.edu.ba

Institutions where employed:

- Date: November 1997
Position: Assistant, Senior Assistant, Assistant Professor, Associate Professor, and Full Professor
Field of Expertise: Quantitative Economics / Applied Mathematics
Institution: Faculty of Economics, University of Bihać
- Date: April 1, 1996
Position: Mathematics Teacher
Institution: Gymnasium Bihać
- Date: December 1, 1983
Position: Mathematics Teacher
Institution: Gymnasium Velika Kladuša

Appointments:

- Chair of the Management Board, Faculty of Economics
- Head of the Second Cycle Study Program, Faculty of Economics, University of Bihać
- Vice-Dean for Academic Affairs, Faculty of Economics, University of Bihać
- Dean of the Faculty of Economics

2. EDUCATION

Undergraduate Studies:

Institution: Faculty of Natural Sciences and Mathematics, Department of Mathematics

Location: Sarajevo

Postgraduate Studies:

Institution: Faculty of Natural Sciences and Mathematics, Department of Mathematics

Location and Year of Completion: Sarajevo, 2003

Title of Master's Thesis: Multi-Criteria Programming with Application in Econometrics

Field of Specialization: Applied Mathematics

Doctoral Studies:

Institution: Faculty of Natural Sciences and Mathematics, Department of Mathematics

Location and Year of Completion: Sarajevo, 2012

Title of Doctoral Dissertation: Multi-Criteria Optimization in Project Management Processes

Field of Specialization: Applied Mathematics

3. SCIENTIFIC ACTIVITY

Scientific and Professional Papers:

1. Kurtanović O., Pašagić H., *"Multi-Criteria Programming and Decision Theory"*, Proceedings of the 3rd International Conference on Revitalization and Modernization of Production, RIM 2001, Bihać, pp. 659–666.
2. Kurtanović O., Pašagić H., *"Dynamic Programming and Graph Theory"*, Proceedings of the 3rd International Conference on Revitalization and Modernization of Production, RIM 2001, Bihać, pp. 667–674.
3. Kurtanović O., *"Multiobjective Linear Programming Problem Solving by STEM Method"*, 9th International Conference on Operational Research KOI 2002, Trogir, Croatia.
4. Kurtanović O., *"Multi-Criteria Model for Optimal Investment in Production for a Multi-Year Planning Period"*, Proceedings of DQM 2003 - 5th International Conference on Quality and Reliability Management, Belgrade, pp. 898–905.
5. Kurtanović O., *"Multi-Criteria Model of Medium-Term Production and Investment Planning"*, Proceedings of the 4th International Scientific Conference on Production Engineering, Bihać, 2003, pp. 823–830.
6. Kurtanović O., *"Car Selection Problem Using PROMETHEE Multi-Criteria Analysis"*, Proceedings of the 4th International Scientific Conference on Production Engineering, Bihać, 2003, pp. 817–822.
7. Kurtanović O., *"Multi-Criteria Analysis of Solutions for a Multi-Year Investment Model"*, Proceedings of the 30th Symposium on Operational Research SYM-OP-IS 2003, Herceg Novi, pp. 791–795.
8. Kurtanović O., *"Multi-Criteria Optimization of Project Time and Resources Using MS Project Software"*, Proceedings of ICDQM 2007, Belgrade, pp. 766–770.
9. Kurtanović O., *"Project Duration as a Function of Maximum Resources per Time Unit"*, Proceedings of the 38th Symposium on Operational Research SYM-OP-IS 2011, Zlatibor, pp. 771–775.
10. Kurtanović O., (co-author) *"Project Liquidity Planning with Expected and Achieved Budget Dynamics"*, ICDQM 2012, Belgrade, pp. 227–232.
11. Kurtanović O., *"Application of Goal Programming in Solving Multi-Criteria Linear Programming Problems"*, Ekonomski Pogledi, 3/2012, Faculty of Economics, Priština, pp. 1–30.
12. Nikolić I., Kurtanović O., *"Information System for Project Management Using MS Project"*, YuInfo 2013, XIX ICT Conference, Kopaonik.
13. Kurtanović O., Nikolić N., *"Determining Activity Duration Based on Resource Engagement and Project Time Minimization Using MS Project"*, Proceedings of ICDQM 2013, Belgrade, pp. 477–483.
14. Kurtanović O., Nikolić N., *"Aspects of Activity Scheduling Constraints in Projects with Multiple Contractors"*, SYM-OP-IS 2013, Zlatibor, pp. 927–932.
15. Kurtanović O., Nikolić N., *"Project Planning with Restricted Activity Periods – Software Support"*, Proceedings of ICDQM 2014, Belgrade, pp. 470–476.
16. Kurtanović O., Omerdić M., *"Single and Multi-Criteria Mathematical Models in Project Cost Management"*, 2nd International Conference NT-2015, Mostar, pp. 436–445.
17. Kurtanović O., *"Some Aspects of Material Planning in Projects"*, Proceedings of ICDQM 2015, Belgrade, pp. 481–487.
18. Pašagić Škrinjar J., Kurtanović O., *"Route Integration and Direction"*, 3rd International Conference NT-2016, Mostar, pp. 491–502.

19. Kurtanović O., Nikolić N., *"Parametric Analysis of Available Resources for Project Duration Minimization"*, Proceedings of ICDQM 2016, Belgrade, pp. 401–40.
20. Kurtanović O., Nikolić N., *"Remarks on Variable Project Costs – Allocation Rules for Cost Payments"*, Proceedings of ICDQM 2017, Prijevor, Serbia, pp. 279–285.
21. Kurtanović O., Dacić L., *"Support Parametric Vector Analysis of Available Resources for Minimisation of Project Duration – Four Varieties of Conditions"*, in: New Technologies, Development and Application, Springer, vol 42, pp. 590–596.
22. Kurtanović O., Destović F., *"Optimisation of Project Duration and Costs Using Over-Working When There are Limitations on Maximum Units"*, Springer, vol 76, pp. 332–341.
23. Kurtanović O., Kurtanović A., *"Selected Applications of Optimization in Economics Supported by Econometrics"*, Proceedings of ICDQM 2020, Belgrade, pp. 153–163.
24. Kurtanović O., Kurtanović A., *"Decision-Making in Marketing Using Multi-Criteria Analysis"*, ICDQM 2020, Belgrade, pp. 232–239.
25. Kurtanović O., Dacić H., Kurtanović A., *"Extension of the Minimum Cost Flow Problem Considering Time and Load Quantity with Maximum Time"*, Economy and Market Communication Review, Vol. XI, No. I, pp. 270–279.
26. Kurtanović O., Stojanović N., Kulenović F., *"Rational and Irrational Values of Trigonometric Functions"*, Osijek Mathematical Journal 21(1), pp. 19–32.
27. Kurtanović O., *"Selected Models from the Perspective of Costs and Financial Inflows"*, Poslovni Konsultant, No. 106, pp. 18–30.
28. Dacić-Čampara L., Kurtanović O., *"Single and Multi-Criteria Models and Algorithms for Cost Management in Relation to Project Duration"*, Poslovni Konsultant, No. 106, pp. 31–44.
29. Kurtanović O., Kurtanović A., *"Minimum Cost Flow Problem Including Vehicles, Two Time Types and Cargo Quantities"*, Springer, vol 233.
30. Kurtanović O., *"Illustrations of Selected Models and Optimal Project Plans"*, Springer, vol 233.
31. Kurtanović O., Dacić-Čampara L., *"Illustration of Selected Optimization Models in Construction Project Management"*, Poslovni Konsultant, No. 107, pp. 48–62.

4. DEVELOPMENT AND PROMOTION OF YOUNG SCHOLARS AND TEACHING ACTIVITIES

Publications (Course Materials and Textbooks):

1. *Collection of Solved Problems in Mathematics*, Faculty of Economics, Bihać, 2005. (Manuscript)
2. *Collection of Solved Problems in Statistics*, Faculty of Economics, Bihać, 2005. (Manuscript)
3. M. Nurkanović, O. Kurtanović, *Mathematics for Economists*, 2013. (ISBN 978-9958-13-079-3, University of Bihać Senate Decision No. 06-3416/2013 dated 04.07.2013)
4. H. Pašagić, O. Kurtanović, *Mathematical Methods in Economics*, 2017. (ISBN 978-9958-17-111-6, University of Bihać Senate Decision No. 06-5625/2017 dated 28.09.2017)
5. L. Dacić-Čampara, O. Kurtanović, *Quantitative Methods in Economics and Management Using Software*, 2022. (ISBN 978-9926-497-00-2, COBISS.BH-ID 48262662)

Teaching Experience:

- Faculty of Economics, University of Bihać:
 - *First cycle*: Mathematics for Economists, Statistics for Economists, Financial and Actuarial Mathematics, Mathematical Methods in Economics
 - *Second cycle*: Quantitative Methods in Management
- Other Institutions:
 - Faculty of Natural Sciences and Mathematics, University of Tuzla: Mathematics I, Integral Transforms
 - Faculty of Mining, Geology and Civil Engineering: Mathematics I, Mathematics II
 - Faculty of Mechanical Engineering, University of Zenica: Mathematics I
 - Faculty of Teacher Education, "Džemal Bijedić" University of Mostar: Mathematics I, II, III
 - Faculty of Civil Engineering, "Džemal Bijedić" University of Mostar: Discrete Mathematics
 - University FINRA Tuzla: Business Mathematics, Mathematics, Business Statistics, Methods and Techniques in Business Decision-Making, Quantitative Research Methods (PhD level)
 - Faculty of Education, University of Sarajevo: Statistics in Scientific Research (PhD level)
 - Faculty of Management and Business Economics: Courses taught: Mathematics for Economists, Statistics, Quantitative Methods in Economics and Management, Quantitative Methods in Scientific Research (PhD level).

Mentorships

- *Doctoral (Third Cycle)*:
 1. Haris Dacić, "Optimization of Voluntary Pension Insurance Application in BiH Based on Analysis of Foreign Practices", Faculty of Management and Business Economics, Travnik (Decision No. 54/2021, defended on 11.03.2021)
- *Master Theses (Second Cycle)*:
 1. Amela Safić, "Quantitative Methods in Project Management" (defended 15.07.2015)
 2. Admir Cucak, "Multi-Criteria Optimization Methods in Decision-Making" (defended 24.10.2015)

3. Branka Vukoja, "Methods and Models of Multi-Criteria Analysis for Optimal Business Decision-Making" (Decision No. 01-NNV-548/2016, defended 04.06.2016)
4. Slađana Kovač, "Mathematical Models of Multi-Criteria Linear Programming for Production Planning in a Construction Company" (Decision No. 01-NNV-1650/2017, defended 20.12.2017)
5. Tea Halilić, "Multi-Criteria Aspects of Decision-Making in the Selection of Project Contractors" (Decision No. 01-NNV-69/2019, defended 18.02.2019)
6. Bobana Velaga, "Optimization of the Production Program Using Linear Programming" (Decision No. 01-NNV-399/2018)

Peer Reviews

- **Textbook Reviews:**

- 7 mathematics textbooks for primary and secondary education
- 3 workbooks in mathematics for primary education
- "Fundamentals of Mathematics" by Prof. Dr. Karmelita Pjanić-Lipovača and Edin Liđan MA
- "Engineering Mathematics" by Prof. Dr. Aladin Crnkić
- "Discrete Mathematics" by Prof. Dr. Mirna Udovičić, SSST University Sarajevo, 2022

- **Paper Reviews:**

- "The Global Dynamics of a Quartic Difference Equation", journal *Mathematica Montisnigri* (Dec. 2019)
- Various papers in the *New Technologies - Development and Application* series (Academy of Sciences and Arts of BiH)
 - Topics include: Difference Polynomial Equations, Hopf Bifurcation, Rational Difference Equations, Competitive Models

Board Memberships:

- Member of the Scientific Committee of the International Conference "New Technologies NT (2016–2025)"

5. PROJECTS

1. Project "*Contemporary Problems in Analysis, Algebra, and Applied Mathematics XV*", led by Dr. Muharem Avdispahić, Full Professor at the Faculty of Natural Sciences and Mathematics, University of Sarajevo. Faculty of Natural Sciences and Mathematics, Sarajevo, 2003. (Co-author)
2. Project "*Applications of Analysis on Completely Disconnected Groups*", led by Dr. Muharem Avdispahić, Full Professor at the Faculty of Natural Sciences and Mathematics, University of Sarajevo. Faculty of Natural Sciences and Mathematics, Sarajevo, 2007. (Co-author)
3. Project "*Generalized Variation and Its Application to Modeling Stock Market Prices*", led by Dr. Lejla Smajlović, Assistant Professor, Faculty of Economics, University of Sarajevo. Faculty of Economics, University of Bihać, 2007. (Co-author)
4. Project "*Selberg Trace Formula and Applications*", led by Dr. Muharem Avdispahić, Full Professor at the Faculty of Natural Sciences and Mathematics, University of Sarajevo. Faculty of Natural Sciences and Mathematics, Sarajevo, 2007. (Co-author)

6. COMMITTEE WORK FOR ACADEMIC APPOINTMENTS

1. Member of the Committee for the appointment to the academic rank of Senior Assistant in the field of "Informatics", Faculty of Economics, University of Bihać (Decision No. 597-8/2012 dated 05.07.2012)
2. Member of the Committee for the appointment to the academic rank of Senior Assistant in the field of "Mathematics", Faculty of Technical Sciences, University of Bihać (Decision No. 1284 dated 23.10.2013)
3. Member of the Committee for the appointment to the academic rank of Assistant in the field of "Mathematics", Faculty of Technical Sciences, University of Bihać (Decision No. 01-1160 dated 22.09.2014)
4. Member of the Committee for the appointment to the academic rank of Senior Assistant for the subjects "Mathematics for Economists", "Statistics for Economists", and "Mathematical Methods in Economics", Faculty of Economics, University of Bihać (Decision No. 01-NNV-1082/2014 dated 09.10.2014)
5. Member of the Committee for the appointment to the academic rank of Assistant Professor in the field of "Mathematics", Faculty of Technical Sciences, University of Bihać (Decision No. 01-90 dated 03.02.2015)
6. Member of the Committee for the appointment to the academic rank of Assistant for the subject "Mathematical Methods in Economics", Faculty of Economics, University of Bihać (Decision No. 01-NNV-1104/2015)
7. Chair of the Committee for the appointment to the academic rank of Assistant Professor for the subject "Business Statistics", Faculty of Economics, University of Zenica (Decision No. 06-200-001-732/20 dated 28.09.2020)
8. Chair of the Committee for the appointment to the academic rank of Assistant Professor for the subjects "Mathematics for Economists" and "Quantitative Methods in Economics", Faculty of Economics, University of Zenica (Decision No. 06-200-001-731/20 dated 28.09.2020)
9. Member of the Committee for the appointment to the academic rank of Assistant in the field of "Quantitative Economics", Faculty of Economics, University of Zenica (Decision No. 06-200-001-119/21 dated 27.01.2021)
10. Chair of the Committee for the appointment to the academic rank of Assistant Professor in the field of "Mathematics", Faculty of Technical Sciences, University of Bihać (Decision No. 01-1041-12/20)
11. Member of the Committee for the appointment to the academic rank of Associate Professor in the field of "Mathematics", Faculty of Technical Sciences, University of Bihać (Decision No. 01-1490/19)
12. Chair of the Committee for the appointment to the academic rank of Assistant for the subjects "Mathematical Methods in Economics" and "Financial and Actuarial Mathematics", Faculty of Economics, University of Bihać (Decision No. 01-NNV-1552/2017 dated 23.11.2017)
13. Chair of the Committee for the appointment to the academic rank of Senior Assistant in the field of "Applied Mathematics", Faculty of Education, University of Bihać (Decision No. 0203-1930/19)
14. Member of the Committee for the appointment to the academic rank of Assistant Professor for the subject "Mathematics", Faculty of Economics, University of Bihać (Decision No. 01-NNV-1583/2015 dated 29.12.2015)
15. Member of the Committee for the appointment to the academic rank of Assistant in the field of "Management", Faculty of Economics, University of Bihać (Decision No. 01-NNV-196/2020 dated 13.02.2020)
16. Member of the Committee for the revision of the existing first-cycle study program, Faculty of Economics, University of Bihać (Decision No. 01-NNV-619/2019 dated 30.05.2019)