

Mohammad Ebrahim Arbabian
Associate Professor
Operations and Technology Management
University of Portland
Phone: +1 503.943.8227
Email: arbabian@up.edu

Summary

Associate Professor of Operations and Technology Management whose work integrates mission-centered teaching, high-impact operations/supply-chain scholarship, and student-focused service. Research appears in ABDC A* and A journals, including MSOM, EJOR, IJPE, and PPC. Teaching emphasizes analytical rigor, applied learning, and mentoring. Service focuses on OTM program development, student career pathways, employer engagement, and School of Business governance.

Education

Ph.D., University of Washington, 2019.
Operations Management

M.Sc., Khaje Nasir Toosi University of Technology, 2012.

B.Sc., Iran University of Science & Technology, 2010.

Academic Experience

Associate Professor, University of Portland (2025 – present)

Assistant Professor, University of Portland (2019 – 2025)

Teaching Assistant, University of Washington- Seattle. (2014- 2019).

Professional Experience

Cofounder, RayPars consulting company, Tehran, Iran.

Marketing Manager, RayPars consulting company, Tehran, Iran (2011 – 2013).

TEACHING

Teaching Experience

Teaching evaluation summary: Consistently strong overall instructor evaluations across undergraduate and graduate OTM courses, with many sections rated 4.7–5.0.

2025–2026 weighted averages: 4.89 valuable learning experience, 4.92 responsiveness to student questions, 4.90 treating students with respect, and 4.87 overall instructor rating.

Teaching approach: applied projects, Excel/R assignments, simulations, WebWork quizzes, guest speakers, site visits, and office-hour mentoring.

Term	Course / Section	Course Title	Enrollment / Possible Respondents	Student Responses	Overall Evaluation
Fall 2019	BUS 453 - A	Supply Chain Analytics	22	20	4.37
Fall 2019	BUS 453 - B	Supply Chain Analytics	7	6	5.00
Fall 2019	BUS 546 - A	Supply Chain Analytics	2	2	5.00
Spring 2020	BUS 355 - A	Decision Modeling	30	22	4.36
Spring 2020	BUS 361 - A	Foundations of Operations Management	21	13	4.69
Fall 2020	BUS 355 - A	Decision Modeling	17	15	3.93
Fall 2020	BUS 355 - B	Decision Modeling	31	28	4.32
Fall 2020	BUS 355 - C	Decision Modeling	30	27	4.85
Spring 2021	BUS 453 - A	Supply Chain Analytics	15	14	4.93
Spring 2021	BUS 453 - B	Supply Chain Analytics	19	16	4.75
Spring 2021	BUS 453 - H	Supply Chain Analytics	1	1	5.00
Spring 2021	BUS 546 - A	Supply Chain Analytics	5	5	4.60
Summer 2021	BUS 453 - A	Supply Chain Analytics	1	1	5.00
Summer 2021	BUS 546 - A	Supply Chain Analytics	6	5	4.60
Fall 2021	BUS 453 - A	Supply Chain Analytics	12	11	4.91
Fall 2021	BUS 453 - B	Supply Chain Analytics	16	12	4.75
Fall 2021	BUS 546 - A	Supply Chain Analytics	1	1	5.00
Spring 2022	BUS 361 - A	Foundations of Operations Management	16	15	4.40
Spring 2022	BUS 460 - A	Process Analysis and Quality Management	14	13	4.77
Spring 2022	BUS 540 - A	Process Analysis and Quality Management	15	13	4.54
Summer 2022	BUS 491 - A	Supply Chain Theory and Design	4	3	4.67
Fall 2022	BUS 361 - A	Foundations of Operations Management	16	13	4.85
Fall 2022	BUS 453 - A	Supply Chain Analytics	20	16	4.83
Fall 2022	BUS 546 - A	Supply Chain Analytics	5	5	5.00
Spring 2023	BUS 355 - A	Decision Modeling and Analysis	27	24	4.83
Spring 2023	BUS 361 - A	Foundations of Operations Management	7	7	4.86
Spring 2023	BUS 540 - A	Process Analysis and Quality Management	10	10	4.90
Summer 2023	BUS 491 - D	Forecasting in R	3	3	5.00
Summer 2023	BUS 491 - J	Supply Chain Theory and Design	1	1	5.00
Summer 2023	BUS 491 - M	Supply Chain Theory and Design	1	1	5.00
Summer 2023	BUS 591 - E	Forecasting in R	4	4	4.75
Summer 2023	BUS 591 - J	Supply Chain Theory and Design	5	5	5.00
Fall 2023	BUS 361 - A	Foundations of Operations Management	19	13	4.77
Fall 2023	BUS 453 - A	Supply Chain Analytics	21	19	4.67
Fall 2023	BUS 546 - A	Supply Chain Analytics	4	4	5.00
Spring 2024	BUS 355 - A	Decision Modeling and Analysis	14	11	5.00
Spring 2024	BUS 361 - A	Foundations of Operations Management	16	13	4.77
Spring 2024	BUS 540 - A	Process Analysis and Quality Management	4	4	5.00
Summer 2024	BUS 491 - D	Forecasting in R	5	5	5
Summer 2024	BUS 491 - J	Supply Chain Theory and Design	2	2	5
Fall 2024	BUS 361 - A	Foundations of Operations Management	10	9	4.78
Fall 2024	BUS 453 - A	Supply Chain Analytics	30	26	4.81
Fall 2024	BUS 546 - A	Supply Chain Analytics	3	2	3.5
Spring 2025	BUS 355 - A	Decision Modeling & Analytics	24	14	4.71
Spring 2025	BUS 361 - A	Foundations of Operations Management	14	11	4.82
Spring 2025	BUS 540 - A	Process Analysis & Quality Management	5	5	5.00
Summer 2025	BUS 491/591 - C/A	Forecasting in R	5	5	4.80
Fall 2025	BUS 361 - A	Foundations of Operations Management	6	5	5.00
Fall 2025	BUS 453 - A	Supply Chain Analytics	17	16	5.00
Fall 2025	BUS 546 - A	Supply Chain Analytics	5	5	4.80
Spring 2026	BUS 355 - A	Decision Modeling and Analysis	16	10	4.6
Spring 2026	BUS 361 - A	Foundations of Operations Management	16	11	5
Spring 2026	BUS 540 - A	Process Analysis and Quality Management	13	9	4.78

Directed Student Learning

Undergraduate Honors Student– Kevin Cochran (Fall 2020).

RESEARCH

Peer Reviewed Journal Articles

Mirco Peron, Luigi Panza, **Mohammad Arbabian**, and Srinivas (Sri) Talluri, 2026, Virgin or recycled powder for producing additive manufacturing spare parts? An economic analysis, Production Planning and Control, forthcoming — **ABDC A**

Mohammad Arbabian, Hossein Rikhtegar Berenji 2023, Inventory systems with uncertain supplier capacity: an application to covid-19 testing, Operations Management Research, Volume 16, pp. 324–344 — **ABDC C**

Mohammad Arbabian, 2022, Supply Chain Coordination via Additive Manufacturing, International Journal of Production Economics, Volume 243 — **ABDC A**

Mohammad Arbabian, Shi Chen, Kamran Moinzadeh, 2021, Capacity Expansion with a Bundled Supply of Attributes: An Application to Cloud Computing, Manufacturing & Service Operations Management, Volume 23 Issue 1 pp. 1-266, C2 — **ABDC A***

Mohammad Arbabian, Michael R Wagner, 2020, The Impact of 3D Printing on Manufacturer-Retailer Supply Chains, European Journal of Operational Research, Volume 282 Issue 2 pp. 538-552 — **ABDC A***

Hamid Haddad, **Mohammad Arbabian** and Keyvan Kamandani Pour, 2012, A Branch and Bound for Single Machine Stochastic Scheduling to Minimize the Maximum Lateness, International Journal of Industrial Engineering, Volume 3 Issue 3 pp. 499-510

Peer Reviewed Journal Articles In Progress

Mohammad Arbabian, Strategic Adoption of 3D Printing in Multi-Product Supply Chains: Cost and Capacity Considerations, European Journal of Operational Research, Major revision — **ABDC A***

Mirco Peron, Luigi Panza, **Mohammad Arbabian**, Can the use of recycled powders reduce AM spare parts costs?, International Journal of Production Research, Minor revision — **ABDC A**

Presentations – Conference Proceedings

Arbabian, Mohammad, Vemprala, Naga, and Gudigantala, Naveen (2025). “Generative AI for Inventory Management: A VAE Based Approach to Demand Modeling,” published at the 6th African Industrial Engineering and Operations Management Conference 2025, Rabat, Morocco.

Arbabian, Mohammad, (2025). “Evaluating the Role of 3D Printing in Decentralized Supply Chains: A Stackelberg Framework for Optimal Manufacturing Decisions ” published at the 15th International Conference on Industrial Engineering and Operations Management.

Arbabian, Mohammad, (2024). “Optimal Inventory Management Policies When Supply Is Bundled ” published at the 9th North American Conference on Industrial Engineering and Operations Management Washington D.C., USA,

Arbabian, Mohammad, Optimal Inventory Management Policies When Supply Is Bundled, North American Conference on Industrial Engineering and Operations Management, Washington, DC, 2024.

Arbabian, Mohammad, H. Rikhtegar, Optimal Inventory Policies in Disrupted Supply Chains During Pandemics: An Application to Diagnostic Test Kits, Northeast DSI, 2021.

Arbabian, Mohammad, Optimal Inventory Policy for Systems with Bundled Supply, Northeast DSI, 2021.

Arbabian, Mohammad, H. Rikhtegar, Optimal Inventory Policies in Disrupted Supply Chains During Pandemics: An Application to Diagnostic Test Kits, DSI, 2021

Other Non-Peer Reviewed Scholarly Work

Presentations

Strategic Adoption of Additive Manufacturing in Multi-Product Supply Chains: Cost and Capacity Considerations

POMS, Annual Conference, Atlanta (invited) 2025

Optimal Inventory Policies in Disrupted Supply Chains During Pandemics: an Application to Diagnostic Test Kits

POMS, Annual Conference, Orlando (invited) 2023

POMS, Annual Conference, Online (invited) 2021

DSI, Annual Conference, Online (invited) 2022

MSOM, Annual Conference, Online 2021

Optimal Inventory Policy for Systems with Bundled Supply

POMS, Annual Conference, Minneapolis 2024

POMS, Annual Conference, Online 2021

Capacity Expansion with a Bundled Supply of Attributes: An Application to Cloud Computing

POMS, Annual Conference, Washington DC 2019

POMS, Annual Conference, Houston, TX (invited) 2018

MSOM, Annual Conference, Dallas, TX 2018

INFORMS, Annual Meeting, Phoenix, AZ (invited) 2018

POMS, Annual Conference, Seattle, WA 2017

INFORMS, Annual Meeting, Houston, TX 2017

The Impact of 3D Printing on Manufacturer-Retailer Supply Chains

POMS, Annual Conference, Houston, TX 2018

MSOM, Annual Conference, Dallas, TX 2018

INFORMS, Annual Meeting, Phoenix, AZ (invited)	2018
POMS, Annual Conference, Seattle, WA	2017
MSOM, Annual Conference, Chapel Hill, NC	2017
INFORMS, Annual Meeting, Houston, TX	2017

Working Manuscripts

1. Strategic Adoption of Additive Manufacturing in Multi-Product Supply Chains: Cost and Capacity Considerations
2. Optimal Inventory Management with Preconfigured Bundles: Strategies for Multi-SKU Prepacks under Deterministic and Stochastic Demand

Awards and Honors

Butine Research Award, University of Portland, Operations and Technology Management, 2025

Butine Research Award, University of Portland, Operations and Technology Management, 2024

Butine Research Award, University of Portland, Operations and Technology Management, 2021

Outstanding Research Award, University of Washington, Information Systems and Operations Management, 2019

Outstanding Teaching Award, University of Washington, Information Systems and Operations Management Department, 2018

Wayne and Ann Gittinger Fellow, University of Washington, Information Systems and Operations Management, 2014-2019

SERVICE

Department Service

OTM Symposium Presentation, 2021; presented my research on additive manufacturing and supply-chain decision-making to OTM faculty, students, Executive Advisory Board members, and industry partners, helping connect current research with OTM program visibility and industry engagement.

Member, Math Taskforce, 2021; contributed to discipline-level discussions on quantitative preparation for business students and helped identify mathematical topics and practice questions needed to support student success in OTM courses.

Member, Hiring Committee, 2020; reviewed faculty applications, participated in candidate evaluation, and contributed to the hiring process for a new faculty member in the School of Business.

Member, Executive Advisory Board (EAB), 2020–present; worked with faculty and industry partners to strengthen OTM programs, support student mentoring, increase employer engagement, and connect curriculum with current industry needs.

Member, OTM Faculty Scholarship Committee, 2020–present; reviewed student applications and helped evaluate candidates based on academic merit, professional promise, and commitment to OTM-related fields.

Member, Internal OTM Awareness EAB Subcommittee, 2020–present; contributed to efforts to increase awareness of OTM, Business Analytics, MIS, and Supply Chain Analytics among students, advisors, and the broader School of Business community.

Member, EAB Scholarship Committee, 2020–present; helped evaluate scholarship candidates and supported a fair selection process that connects high-performing students with financial and professional support from the EAB.

Chair, OTM Discipline, 2025–2026; led discipline-level coordination on scheduling, curriculum issues, bulletin changes, Assurance of Learning requirements, academic reporting, advising materials, and program-development priorities.

Vice Chair, Executive Advisory Board, 2025–2026; helped coordinate EAB activities, strengthen relationships with industry partners, support student-facing events, and advance the board's role in mentoring, scholarships, and employer engagement.

Leader, Bulletin Changes, 2025–2026; coordinated OTM-related bulletin updates to improve program clarity, align curriculum language with current offerings, and support accurate advising for students.

Leader, OTM Academic Advising Survey, 2025–2026; led the development of clearer, market-oriented advising language for OTM, Business Analytics, MIS, and Supply Chain Analytics to help advisors communicate program value and career pathways.

Leader, Academic Dialogues Report, 2025–2026; coordinated OTM faculty input and prepared discipline-level reporting on curriculum, program direction, student needs, and strategic priorities.

Leader, Discipline Survey, 2025–2026; led the design and coordination of a discipline survey to gather input on OTM-related programs, advising needs, student perceptions, and opportunities for program improvement.

Leader, Pacific Seafood and Oregon PERS Student Recruiting Initiatives, 2025–2026; organized employer-engagement events with approximately 30 student attendees and 20 interviews, contributing to five students securing jobs or internships.

Leader, OTM Program Dialogue, 2025–2026; coordinated faculty discussions on curriculum, course sequencing, elective offerings, Python, simulation, analytics, graduate scheduling, and the long-term direction of OTM-related programs.

Leader, OTM-related Scholarship Candidate Selection, 2025–2026; organized the review process, coordinated faculty input, and helped ensure fair and mission-aligned selection of scholarship recipients.

Leader, OTM Adjunct Search, 2025–2026; led the adjunct search process by identifying course needs, preparing job descriptions, developing interview questions, reviewing candidates, and supporting selection of instructors with appropriate expertise and applied teaching orientation.

School Service

Faculty advisor, 2020–present; advised and mentored approximately 15 students per year through meetings, office hours, email, and informal mentoring, including prospective and current OTM students, MSOTM students, alumni, students seeking internships/jobs, and students considering graduate study.

Experiential learning, 2020–present; integrated applied assignments, supply-chain simulations, guest speakers, a Daimler factory tour, R assignments, and internship/job preparation into OTM and analytics courses.

Member, Math Taskforce, 2020; helped identify core quantitative skills required for business students and supported the development of WebWork-based practice questions.

Member, School of Business Research Forum, 2022; contributed to discussions on criteria for defining and evaluating scholarly activity among School of Business faculty.

Member, Retention Taskforce, 2022–2023; contributed to the development of student-support initiatives aimed at strengthening students' sense of belonging in the School of Business.

Member, Math 141 Restructure Committee, 2021; helped identify quantitative topics and develop WebWork-based questions to support student preparation in business mathematics.

AACSB Assurance of Learning contributor, 2023–present; supported course-embedded assessment through quizzes, exams, projects, and assignments aligned with quantitative, analytic, business, and communication competencies.

Member, School of Business Research Committee, 2024–2025; helped develop criteria and processes for distributing more than \$200,000 in research support over three years.

Chair, School of Business Research Committee, 2025–2026; led the development of a transparent framework for distributing more than \$200,000 in research support over three years.

Member, Search Committee for Associate Dean and Assistant Dean, 2025–2026; reviewed candidate materials, participated in evaluation discussions, and helped identify qualified candidates for School of Business leadership roles.

University Service

Honors Mentor, University of Portland Honors Program, 2021; mentored an undergraduate Honors student in Operations and Technology Management, providing academic guidance and supporting the student’s development through an applied research and learning experience.

School of Business Senator, University of Portland, 2021–present; represented School of Business faculty in university-level governance, reviewed proposals and committee reports, participated in Senate discussions, communicated relevant Senate matters back to School colleagues, and brought School of Business perspectives to broader university conversations.

Howard Hughes Medical Institute’s Inclusive Excellence 3 Grant Leadership Team Member, 2024; contributed to university-wide conversations and initiatives focused on inclusive excellence, student belonging, and strategies for strengthening equity and inclusion across the University of Portland.

Professional Service

Reviewer and Editorial Board Service, 2021–present; reviewed approximately 20 manuscripts for leading journals and conferences in operations management, supply chain management, and industrial engineering, including EJOR, IJPE, POM, OMR, CIE, and NEDSI; contributed to the peer-review process and the development of high-quality scholarship in my field.

Professional Memberships

INFORMS, POMS, DSI