

MSM – Operations Research & Supply Chain Management

Fall 2018



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Faculty Director

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WEATHERHEAD
SCHOOL OF MANAGEMENT

CASE WESTERN RESERVE
UNIVERSITY

Case Western Reserve University (CWRU)

- Ranked 1st in Ohio, by U.S. News & World Report, 2018
- Ranked 37th among national universities, by U.S. News & World Report, 2018
- Ranked 34th among national universities, by The Wall Street Journal/Times Higher Education (WSJ/THE) rankings, 2018
- A private research university
- About 12,000 students from 81 countries (Fall 2017)
 - 6,674 Graduate Students
 - 5,150 Undergraduate Students
- More than 110,000 alumni across the world
- 16 Nobel laureates including the first American scientist ever to receive the Prize
- Over 400 student clubs
- Renowned in Engineering, Medicine, Law, Management, Nursing & Social Work
- Located at the heart of Cleveland, in University Circle
- Launch your innovations with Sears think[box] (design and build your ideas), CWRU LaunchNet (finance your ideas), and IP Venture Clinic (protect your ideas)
- Our Kelvin Smith Library has over 1.7 million volumes of books and resources



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Weatherhead School of Management (WSOM)

- Ranked 28th MBA (Full-Time) in U.S., by America Economia, 2017
- Ranked 31st undergraduate business program, by U.S. News & World Report, 2018
- Ranked 7th Executive MBA in the Midwest, by Ivy Exec rankings, 2016
- First graduate disciplines in operations research & organizational behavior
- World's first PhDs in operations research & organizational behavior
- First Department of Design & Innovation in a management school
- First School to develop Leadership Assessment and Development (LEAD) course and make it part of MBA curriculum
- 1,472 students (about 70% graduate level and higher)
- Eye-catching and world famous Peter B. Lewis building by renown architect Frank Gehry, opened in 2002



Operations Research and Supply Chain (ORSC) Management Program

- Renowned OR and Supply Chain Management program
- Unique curriculum
 - Incorporates LEAD in curriculum
- Interdisciplinary (Marketing, Finance, Accounting, Leadership)
- Six Sigma green-belt certification
 - Work with a real-life company and given a life project using actual data
- Free workshops in R, SAP, Visual Basic, and Python programming
- Emphasis on technical skills that companies want AND the skills unique to business schools
- Small cohort of less than 50 students, multi-ethnic, team-based, real-world projects, world-class instruction, world-class facilities, located at cultural and industrial center



Outline

- ORSC Curriculum: How is it Different?
- Admission Process
- Student Experience in the Program
- Job Placement
- Student Life and the City of Cleveland



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Operations Research and Supply Chain (ORSC) Management Program

- Blending technical expertise AND the language of business
 - Business Core: Marketing, Finance, Leadership - 9 credits
 - Operations Research Core: Optimization, Probability & Statistics, Integrated Problem Solving, Stochastic Processes, Simulation, VBA Programming – 12 credits
 - Specialty Core: Operations Management, Lean Six Sigma, Enterprise Resource Planning, Supply Chain Logistics, Lean Operations, Project Management – 15 credits
- Company-driven Six Sigma projects, green belt certification, and training with R, Visual Basic Programming, SAP, Python to make students readily employable
- 18-month program (Fall, Spring, Fall) with summer devoted (optionally) to internships
- STEM eligibility allows for optional practical training (OPT) while seeking a full time job – up to 3 years
- Award-winning faculty instructors
- weatherhead.case.edu/orsc – Click on “Curriculum”



Admission Process

- One Cohort per starting term, about 50 students
- Commonly admitted scores:
 - GMAT – 700
 - GRE – 318
 - Quantitative – 90%
 - Verbal – 60%
 - TOEFL/IELTS – 100/7.0
 - GPA – 3.4/4.0
- Pre-requisites include:
 - Calculus I and II
 - Linear Algebra
 - Statistics (not required, but strongly recommended)
- weatherhead.case.edu/orsc – Click on “Class Profile”
- Application components:
 - Resume
 - 2 Essays
 - 2 Letters of Recommendation
 - GMAT or GRE test scores (unofficial)
 - TOEFL or IELTS test scores (unofficial, international only)
 - Transcripts (unofficial, all institutions, including GPA/avg. score & grading scale)
- Interview (invitation only)
- Multiple rounds in which to apply
- Competitive, merit-based tuition scholarships between 20-50%
- weatherhead.case.edu/orsc – Click on “Admission Information”



Student Experience

- Connect with students and future classmates through social media:
 - Yocket (<https://yocket.in/universities/reviews/820/case-western-reserve-university/engineering>)
 - WhatsApp (<https://chat.whatsapp.com/Dn0fdGFDtsN8qgixUJjxGU>)
 - Chase Dreams (<https://forum.chasedream.com/forum.php?mod=viewthread&tid=1287789&fromuid=1198508>)
 - LinkedIn <https://www.linkedin.com/groups/4739349>
- Student-run clubs organize SCM-related activities
 - Operations Club, Weatherhead Consulting Club, Marketing and Strategy Club, etc.
- Simulation games
 - The Beer Game, The Everest Game, The Lego Tower Game, etc.
- Plant tours
- Social events
- weatherhead.case.edu/orsc – Click on “Student Experience”



QR Codes

WeChat Group



WhatsApp Group



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Job Placements

- Program Director, **Matthew Maloney**, is dedicated to the ORSC program by helping students find internships and full-time jobs upon graduation
- 100% placement record within 9-months from graduation
- weatherhead.case.edu/orsc – Click on “Career Management”
- LinkedIn groups of ORSC Alumni in major metropolitan centers
<https://www.linkedin.com/groups/4739349>
- Extensive network of companies in Cleveland and throughout Ohio
- A significant network of alums in organizations outside of Ohio include major cities such as LA, San Francisco, NY, Chicago and Seattle
- Weatherhead School Career Management Office
 - Career Assessment • Career Fairs, Workshops and Employer Information Sessions
 - Coaching • Job Listings • Mock interviews • Resume reviews
 - Networking events with employers and alumni
- <https://weatherhead.case.edu/careers/graduate/>



Businesses Love Cleveland

- Centrally located between New York City, Chicago, Washington D.C., Atlanta, Boston and Toronto, Canada
- 70% of Fortune 500 companies have a presence in Northeast Ohio
 - More than 37% are through corporate headquarters, major divisions, subsidiaries, and sales offices
 - Corporate headquarters include Goodyear Tire & Rubber, Eaton Corp., FirstEnergy Corp., Progressive, Parker Hannifin Corp., Sherwin Williams, TravelCenters of America, and KeyCorp, J.M. Smucker and more
- 2/3 of manufacturing output destined for Northeast US is either manufactured or transported through Cleveland
- Large presence of Advanced Manufacturing & Service firms
 - Alcoa, GE, Parker, Lubrizol, Avery-Dennison, American Greetings, Penske Logistics, Saint-Gobain, Rockwell Automation, Moen, etc.
- National leader in Healthcare & Medicine
 - Home to the Cleveland Clinic, America's Top 4 Hospitals and #1 in the country for heart care
 - University Hospitals, Cardinal Health, Metrohealth systems
- Large presence of Financial, Insurance & Professional Services
 - One of 12 cities in the USA with a Federal Reserve Bank
 - Major presence from Keybank, Fifth Third and Huntington
 - Progressive Insurance ranks #1 in USA in Automotive
- Other notable industries: Entrepreneurialism, Polymers & Logistics, Aerospace (we have NASA!), Biotechnology & Biomedical, Advanced Energy



Student Life in Cleveland

CWRU is located in University Circle, the Uptown neighborhood of Cleveland, surrounded by many world-class institutions

Art & Museums

- Cleveland Museum of Art, #2 best nationally
- Cleveland Botanical Gardens
- Cleveland Museum of Natural History
- Museum of Contemporary Art (MOCA)
- Rock & Roll Hall of Fame
- Great Lakes Science Center & Planetarium

Sports & Leisure

- Basketball – Cavaliers
- Baseball – Indians
- Football – Browns
- Hockey – Lake Erie Monsters
- Cleveland Marathon
- Cleveland Metroparks: hiking, kayaking, marina
- Lake Erie: beaches, boating, fishing, jet skiing, parasailing

Music & Theater

- Playhouse Square, second largest concentration of theaters outside of NYC
- Severance Hall, home of The Cleveland Orchestra (Top 5 national symphony orchestra)
- Cleveland POPS Orchestra
- Cleveland Jazz Orchestra
- Great Lakes Science Center, OMNIMAX Theater

Food & Other Activities

- West Side Market
- Over 25 local craft beer breweries
- Home of Food Network star Michael Symon's award-winning restaurants
- Cleveland Metropark Zoo
- Greater Cleveland Aquarium
- Cedar Point Amusement Park
- Jack Cleveland Casino and Thistledown Racino



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Affordability & Accessibility

- Ohio ranks #1 for housing affordability, according to U.S. News & World Report, 2018

- Chicago is 66% more expensive
- Boston is 129% more expensive
- San Diego is 167% more expensive
- San Francisco is 275% more expensive
- New York City is 432% more expensive



- Dozens of safe and affordable neighborhoods less than 20 minutes away
 - Little Italy • Cleveland Heights • Coventry • University Heights • Downtown • Warehouse District
 - Shaker • Tremont/Ohio City • Cedar/Fairmont • Cedar/Lee
 - Rent can range from \$500-\$600 per month (one bedroom) or \$700-\$900 (two bedroom) and up
- Public Transportation
 - Cleveland RTA & Rapid (buses and trains)
 - Shuttles – Download an app to track the shuttles
 - Safe Ride – Late night/Early morning safe rides
 - Cleveland-Hopkins International Airport (accessible from RTA's Red Line)
 - Bike Share and Car Share services



Any Questions?

Faculty/Staff:

- Professor George Vairaktarakis, Faculty Director:
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- Meredith Richardson, Admissions Manager:
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- Matthew Maloney, Program Director (including internships/job placements):
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Current Students to contact for Questions:

- Yatrik Shah:
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