

Melanie Basantis

Henry M. Rowan College of Engineering
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Expertise

- Extensive STEM curriculum development and program implementation experience
- Managed and implemented numerous STEM programs for middle and high school students
- Hosts over 1000 School-aged students annually in field experiences in general engineering
- Extensive experience in collegiate career services and professional development of students
- Detailed knowledge of Rowan University resources, policies, personnel and culture
- Established network of organizational and industrial contacts
- Student focused with a passion for guidance to achieve students' post-graduate goals
- Proficient at determining strategic plans and making decision based upon economic impacts
- Detail oriented with the ability to communicate with all audiences and on all levels
- Advanced Manufacturing Practices and Principles

Education

MBA Business Administration
B.S. Industrial Engineering
B.S. Business Management

Widener University - 1991
The Pennsylvania State University - 1985
The Pennsylvania State University - 1985

Experience

Rowan University, Henry M. Rowan College of Engineering

Adjunct Professor – Junior/Senior Engineering Clinic, project based STEM 2010 - present
Director, Engineering Outreach 2000 - present

- Manage the engineering career program to be efficient and effective for both students and employers achieving placement statistics at 90% - 100% for the last 15 years
- Work effectively with higher administration, faculty, staff and students to develop strategic initiatives to achieve College and individual goals
- Supervision of an in-unit employee and numerous student workers
- Develop and maintain budget for the Engineering Outreach Office
- Advise students, individually and in small and large groups, on career and summer internship opportunities including job search resources and techniques, resume writing, networking, career fair guidance and interview skills
- Develop and present Professionalism seminars to all Freshmen annually
- Collaborate with faculty to provide Professionalism seminars to all engineering students
- Work with Industry to conveniently and efficiently provide access to engineering students for various requirements including jobs, internships, research, clinic and scholarship opportunities.
- Effectively collaborate with the Office of Career Advancement
 - o Member, Office of Career Services Coalition of Colleges
- STEM Director for the College of Engineering
 - o Developed the Engineering Field Experience program which provides the K-12 community the opportunity to visit the Henry M. Rowan College of Engineering
 - o Direct the STEM summer programs
- Manage numerous extraneous outreach initiatives for the College of Engineering including an alumni panel session, Industry Day support, Rutgers Career Day presentation, Rowan representative at Career Fairs and College database administrator
- Senate T&R committee representative

Internship Coordinator 1998 – 2000
- Coordinate and advise students on summer internship opportunities. Create and implement improvements on the internship process

Boeing Defense & Space Group Philadelphia, PA

Process Engineer - 609 Program 1994 – 1998
- Pre-plan the production of the state-of-the-art 609 Civil Tiltrotor Aircraft
- Manage, coordinate, and optimize all aspects of manufacturing from high level engineering schedules to structural design analysis.
- Create and develop budgets, manpower forecasts, workload estimations, detailed database programming and cost and schedule analysis

Manager - 757/ 767 Composite Fabrication 1992 – 1994
- First line composite fabrication supervisor on the 757 and 767 aircraft programs
- Manage two manufacturing areas of 13-20 unionized production workers, assign and prioritize work schedules, effectively utilize support organizations and coordinate the efficient operation of the shop floor while maintaining targeted cost and schedule

Senior Industrial Analyst - V-22 Flight Test/D-MOD 1985 – 1992
- Critical path scheduling, cost tracking, manpower analysis, schedule impact analysis, earned value analysis, ROI analysis.

Professional Activities/Membership

Member:

Athens Institute for Education and Research (ATINER)

American Society of Engineering Education (ASEE)

New Jersey Tech Council (NJTC)

Women in Engineering Programs & Advocates Network (WEPAN)

New Jersey Cooperative Education & Internship Association (NJCEIA)

Publications/Conference Presentation:

Ahmed, M. M., & Basantis, M., & Jahan, K. (2019, June), Board 135: Reflecting on 20 Years of the Attracting Women into Engineering (AWE) Workshop Paper presented at 2019 ASEE Annual Conference & Exposition, Tampa, Florida. <https://peer.asee.org/32244>

Basantis, M., Jahan, K. (2019, June), A Model for STEM success, 20 Years of the Attracting Women into Engineering (AWE) Workshop, Sharing the Pedagogy and Assessing the Impact Paper presented at the 4th Annual International Conference on Engineering Education & Teaching, Athens, Greece

L. Head, M. Basantis, S. Chin, B. Pietrucha (2014, June), Training for Student Teaching Fellows at Rowan University Paper presented at 2014 ASEE Annual Conference & Exposition, Indianapolis, IN.

K. Jahan, S. Chin and M. Basantis, (2002) "Impact of Research Experiences on Female Engineering Students" Proceedings of the Annual WEPAN Conference, June 2002, San Juan, Puerto Rico.

Z. Otero Gephardt and M. Basantis, (2000) "An Industrial Internship Program to Enhance Student Learning and Marketability", ASEE Annual Conference & Exposition, July 2000.

Synergistic Activities:

- Served as Session Chair for 4th Annual International Conference on Engineering Education & Teaching, Athens, Greece, June 2019
- ASEE Peer Reviewer for 2019 ASEE Annual Conference & Exposition
- Developed and currently manage and direct summer STEM workshops providing engineering exploration through hands-on projects to middle school girls (2009-present), middle school boys (2012-present) and high schoolers (2008 – present)
- Coordinate and manage engineering segment supporting Rowan University Camden's CHAMP (Creating Higher Aspirations and Motivations Project) which focuses on under-represented middle and high school students gaining early awareness and readiness for undergraduate programs.
- Develop and update curriculum and program for field trips from K-12 schools to the Henry M. Rowan College of Engineering 2013-present
- Served as ASEE Peer Reviewer for The Collaborative Network for Engineering and Computing Diversity (CoNECD) 2019
- ASEE Peer Reviewer for 2015 ASEE Annual Conference & Exposition

Professional Biography:

Professor Melanie Basantis (Director, Engineering Outreach/Professor) earned her MBA from Widener University and dual degrees in Industrial Engineering and Business Management from The Pennsylvania State University. Prof. Basantis spent 15 years in industry at the Boeing Company working as an Engineer on projects related to defense aircraft including the V-22 Osprey and CH-46 and CH-47 tandem rotor helicopters along with being a Composite Manger on the 757 and 767 commercial aircraft programs. Prof. Basantis has experience in the development and implementation of new and innovative technologies in the manufacturing processes associated with revolutionary, new assembly methods and concepts for aircraft application. She is experienced in the utilization of lean manufacturing, total quality management, and ISO concepts and specifications in the implementation of these processes. As Engineering Outreach Director, Prof. Basantis collaborates with industry on initiatives that include, but not limited to professionalism, internship experience, job placement, student development and enrichment, as well as concentrated faculty research. Prof. Basantis provides leadership to The College of Engineering's STEM initiatives and has done so for the past 15 years. Middle and High school camps and field experiences are held under her guidance and expertise.