Industry Advisory Board Meeting
October 20, 2021

STEM Division

Dr. Edem G. Tetteh, Dean

Advisory Board Agenda

- Welcome – Dr. Tetteh

- Spring Meeting Minutes Approval – Frank Cumbo

- State of STEM Division – Dr. Tetteh
  - New Degrees
  - Degree Marketing
  - ABET/ATMAE Updates
  - TEC Cources

- Role of Advisory Board – Frank Cumbo

- STEM Advisory Board Awards – Frank Cumbo
  - Nomination and Selection Process
  - Fund Raising Opportunity

- MET/EET and Computer Science Break-out Sessions
  - Alumni/Employer Survey
  - Undergraduate Research Opportunities
  - Recruitment Update/Employer Needs

Rowan College at **BURLINGTON COUNTY**

Welcome

- Special Welcome to New Members
  - Christine Wacta-Rawlinson, Ph.D.
    - Curriculum development /Faculty leadership at Rowan College at Burlington County
  - Chu Mehchu, Ph.D
    - Professor of Electrical Engineering Technology, RCBC

Approval of Previous Meeting Minutes

(June 17, 2020)

State of STEM

- Congratulations!
- Dr. Tiffany Ruocco
- New Hires
  - Chef Desmond keefe, CUL Director
  - Jacqueline Magana, Lab Coordinator
  - Susan Maynard, Lab Tech
  - Christopher Mance, EET Faculty
- Left the College
  - Dan Sullivan, NSF Grant Coordinator
  - Jocelyn Small, STEM Secretary
  - Liz Spicer, Lab Coordinator

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Faculty Leadership

- Department Chairs:
    - Department of Mathematics and Professional Studies: **Crystal Bourne**
    - Department of Applied Sciences: **Jennifer Rienzi**
    - Department of Applied Engineering Technology: **Dave Wilson**
    - Department of Information Technology and Computing: **Paul Warner**

https://my.rcbc.edu/sites/default/files/Documents/stem/May%202021%20.html

Spring and Summer Initiatives

- Curriculum innovations
  - New programs
    - AAS. Applied Technology Management- ATM (2+2)
- Potential 3+1 Programs
  - Construction Management (Fall 2022)
  - Programs with no start date
    - Engineering Technology Management
    - MS in Cybersecurity
    - Biochemistry or Biophysical Chemistry
    - Environmental Science/Studies 2+2

Rowan College at **BURLINGTON COUNTY**

ABET Accreditation

Computer Servicing and Network Technology, AAS Program

Electronics Engineering Technology AAS Program

- Accredit to September 30, 2023.

- A request to ABET by January 31, 2022 will be required to initiate a reaccreditation report evaluation.

- A report describing the actions taken to correct shortcomings identified in the attached final statement must be submitted to ABET by July 1, 2022.

- The reaccreditation evaluation will focus on these shortcomings. Please note that a visit is not required.

- A weakness indicates that a program lacks the strength of compliance with a criterion, policy, or procedure to ensure that the quality of the program will not be compromised.

- Therefore, remedial action is required to strengthen compliance with the criterion, policy, or procedure prior to the next review.

ABET Accreditation

- Computer Servicing and Network Technology, AAS Program
  - Criterion 4. Continuous Improvement: Weakness
  - Accreditation Policy and Procedure Manual: Weakness
  - Criterion 6. Faculty: Unresolved
- Electronics Engineering Technology AAS Program
  - Criterion 4. Continuous Improvement: Weakness
  - Criterion 6. Faculty: Unresolved

Fall Initiatives

- Lockheed Martin
  - Signal Processing Equipment Donation
    - Spectrum Analyzer
    - Network Analyzer
  - Engineering Design skills
    - MATLAB
    - Solidworks

- Undergraduate Research Program
  - Funding
  - Virtual projects

- More
  - Efforts on grants
  - STEM Advisory Boards
  - Center for Career Excellence in Cybersecurity

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New TEC Courses

- Career Readiness
- Safety Management
- Entrepreneurship
- Project Management
- Lean Six Sigma
- Quality Management
- Supply Chain and Distribution (In development phase for Fall 2022)

Role of STEM Advisory Board

- Provide Support to Implementing RCBC's Vision and Mission and Supporting Effective Outcomes
- Provide Advice To Program(s), Assist in Development of New Programs and Identify Best Practices
- Realistically Assess the Labor Market Demand and Advise Program to Ensure It Produces Graduates With Skills To Meet Employment Needs (From Day 1)
- Assist With Program Marketing and Promotion. Participate in Branding Opportunities.
- Assist in Identification and Acquisition (when appropriate) of External Funding and Resources To Support Student and Program
- Assist With Placement of Graduates, Interns. Sponsor Student Projects
- Recruit New Board Members (Strike Balance Between Educators, Government, Industry)
- Personal Characteristics
  - Ability to listen, analyze, think creatively.
  - Willing to prepare for, and attend, board meetings
  - Friendly, patient approach, personal integrity & values.
  - Sincere concern for and interest in program's development

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STEM Advisory Board Awards

- Process
  - Awards Funded By STEM Deans Special Initiatives By Advisory Board Funding Raining (e.g. Science
  - Department Head Made Nominations With Justification Based on Criteria
    - Teamwork
    - Perseverance
    - Innovativeness
  - STEM Advisory Board Reviewed Nominations and Selected 2 Award Winners
  - Board Chair Submits the 2 Names To the Dean

Fundraising Opportunities

Whole Panel $1,000
- Panel May be Partitioned into Up to 4 Sections

Umbrella Panel
$250 Each

Kudos to the STEM Staff and Faculty

Split

EET/MET and Computer Science Sub-Committees

Undergraduate Research Opportunities

- Teach students to formulate testable hypotheses about important topics in your company!

- Encourage students to develop skills in experimental design, data collection, analysis, and critical reading of primary scientific literature.

- Students also learn to prepare and communicate scientific information to other scientists and the general public

- Timing: Continuous

- Rowan Contact: Steven Kotowich, Ph.D (skotowich@rcbc.edu)

- If you are interested to learn more share your information in the chat.

MET Employer Needs Survey and New Certificate Programs

Top Skills Per Local Industry Input (By Ranking Per 2019 Survey)	
Soft Skills	**Technical Skills**
Work Ethic	Applications - Basic Math/Physics
Communication	Computers
Teamwork	CNC Programming
Creativity	Technical Reading & Writing
Analytical	Autocad
Critical Thinking/Decision Making	3_D Printing
Continuous Learner/Persistence	Tolerance Functions

Minutes From Discussion With MET Advisory Board February 2020	
1. Soft Skills are at Least as Important as Hard Skills	
2. Problem Solving	
3. Attention to Deatil (Short Attention Span, Don't Read Manuals, Miss Numbers)	
4. Electro-Mechanical System Part Recognition (sensors, switchs, PLCs, motors)	
6. Aptitude	
7. Attitude, Willingness To Learn	
8. Work Ethic (Millenials on Phones, Come in Late, etc)	
Recommendations	
5. Field Trips to MET Employers. Mandatory For Students To Participate In Visits To Local Area Companies	
	a. Exposure to different industries
	b. Exposure to different jobs within the industries
	c. Familirization to type of skills needed in those jobs
6. Coops (Same Benefits As Field Trips + Exposure to Work Life, Manufacturing Environment)	

New Courses & Programs

Career Readiness

Safety Management

Entrepreneurship

Project Management

Lean Six Sigma

Quality Management

Supply Chain and Distribution (In development phase for Fall 2022)

MET/EET Update

Dave Wilson

Computing ProgramUpdate

Paul Warner

Thank You!