

Fall 2021 BPCCEngineering Advisory Committee Minutes

Date: October 8, 2021
Virtual Teams Meeting

Attendees:

Tanita Baker	Holly French Hart	Kurt Nixon	Giovanni Solitro
Megan Bange	Ahmed Kattab	Rob Ombough	Paul Spivey
Brian Carlisle	Mark Lanier	Dave Rambaran	Susannah Stinson
Clif Frilot	Gordon Marshall	Charles Reed	Heath Tims
Russ Gideon	Elizabeth M Melvin	Beonica Rutherford Fraizer	Beth Voss
Joseph Grenier	Ali Mustapha	June Schneider	Corey Wilson
Deanna Hardy	Robert Newberry	Jeanne Smith	

Welcome and Introductions

Megan Bange, Dean of Technology, Engineering and Mathematics, welcomed everyone and turned the meeting over to the program director, Dr. Schneider, to begin round table introductions.

Adoption of last meeting minutes

VOTE

Russ Gideon asked for a motion to approve the minutes from the last advisory board meeting held on March 6, 2020.

Ali Mustapha made a motion to approve the minutes from March 6, 2020.

The motion was seconded by Robert Newberry.

Vote in favor of motion is unanimous.

State of the Department

- Enrollment, Graduation and Transfer Data
Dr. Schneider reviewed the data for the past year that showed the decline in attendance during the Spring 2021 semester and the resurgence of students coming back in the Fall 2021.
Even with the pandemic it is estimated that 12 students will graduate the Engineering program this year.
- How did we deliver curriculum during pandemic?
The Engineering program curriculum during the pandemic was totally online from Spring 2020 – December 2020. All the material was delivered via video on YouTube created by Dr. Schneider. In the Spring, the hybrid option was used in conjunction with the online classes. The Fall 2021 semester is back to the face to face format with the hands-on projects.
- Student Success Stories
Dr. Schneider showcased 11 students who are continuing their education or are working in the Engineering field
- Johns-Hopkins Engineering Innovation at BPCCE
The Engineering Innovation program will have an event this summer where high school students who are Juniors or Seniors (with the required prerequisites) will earn 3 Johns Hopkins University Engineering credits that can be transferred to other colleges. Students

will be at BPCC from 8:00 – 3:00 each day and Dr. Schneider would like to have industry partners participate by coming to give talks and sponsor lunch.

- **State and National SkillsUSA 2021**

BPCC had two students, Ben Allen and Ethan Morris who competed in the category of Technical Math and Principles of Engineering and Engineering design. They placed at the gold medalist at the state level and 5th place at National level.

MATH, PHYS and ENGR Courses Learning Outcomes and Curriculum Update

- Math 113 has been added to the Spring 2021 semester. It is a 6-credit hour combination of College Algebra and Trigonometry; the prerequisite is a “B” or higher in Math 099. This course will better prepare students for Calculus I. This course will map to the Board of Regents CMAT 1233-6 and be equivalent to the course at LA Tech, LSUS and LSU.

Calculus Series

- In order to match the Engineering curriculum for students a path to teach out the current 3-3-3 credit hours to 5-4-3 the Calculus series has been established. It will streamline the progression to the upper level Engineering courses to set up the series that matches most institutions. This change does not change the hours for the program.
- We propose to change the hours of Calculus:
 - Calculus I 5 hours – beginning in the Spring 2022 semester
 - Calculus II 4 hours – beginning in the Fall 2022 semester
 - Calculus III 3 hours – no change

VOTE

Russ Gideon asked for a motion to approve the program objectives and length.

Robert Newberry made a motion to approve the program objectives and length.

The motion was seconded by Beonica Rutherford-Fraizer.

Vote in favor of motion is unanimous.

Scholarship and Internship

- **BPCC Endowed Scholarship in Engineering & Gene Hass Foundation Scholarship:**
Susie Stinson reported the Engineering Endowed Scholarship that was matched with the Board of Regents and this will be the first year this can be awarded. The spending policy allowed about \$2000.00 this year.
The Gene Hass Scholarship will be available to other students who are not in the Engineering program. Megan reported we have received a 5 Access CMC machine that will be used in non-credit courses and will be imbedded in some of our Industrial Tech classes. There is still some training for the instructors using the machine. The students taking these classes will be eligible to receive the 3rd round of Gene Hass Scholarship funds. These funds will be available to be awarded in the Spring 2022.
- **Louisiana Engineering Society (LES)-Shreveport Chapter Donation:**
On behalf of the LES, Ali Mustapha will contribute \$500.00 to support the Engineering Program.
- **Internships:**
Dr. Schneider thanks the industry partners on the internship training this past year:

- Dave Rambaran Geosciences, LLC 6 Students
- Dr. Giovanni Solitro's Biomechanics Lab at LSUHSC 2 Students
- Raley and Associates 2 Students
- EJES 2 Students
- Professional Service Industries, Inc (PSI) 3-4 Students

BPCC Engineering Articulations

- Heath Tims reported there are an average of 6 students per year that transfer to LA Tech. The transfer students do well and the match up of courses seems to work except for the electrical engineering students who do get a little behind and usually take more time to complete. The change to the freshman year where the requirement of the literature course was eliminated has it lined up better to the LA Tech curriculum. It still is taking most of the students 3 years instead of 2 years. The number of students is so small it is easier to manage it rather than making changes to the program. The other concentrations seem to be working well.
- Dr. Ahmed Kattab from ULL said the students they get from BPCC are very good students and are good matches to their program. They would like to update the Articulation Agreement that would reflect the changes made by BPCC, but generally don't have issues with the current agreement.
- Dr. Elizabeth Melvin from LSU said their Engineering Program does not start until the Sophomore year and has similar issues that LA Tech has with the program. The students coming from BPCC have been good students. Would like to make some changes so the transfer students are not a whole year behind. She suggested dual enrollment for some of the concentrations. It would help to get some of the LSU Sophomore classes completed prior to enrolling. They are also looking into offering some classes more than once a year.

Plan for this year

- Dr. Schneider asked the board to participate in the live poll on member involvement activities. The results were:
 - Sponsor Field Trip 14%
 - Guest Lecture 19%
 - Give Class Project Ideas 9%
 - Give Scholarship 4%
 - Provide Internship Opportunity 19%
 - Judge Freshman Engineering Design Expo 33%
 - Provide a tour at 4-year college 40%
 - Sponsor a lunch and learn 20%
 - Give informal talk at JH Engineering Camp 20%
 - Bring high school students to Design Expo 0%
 - Schedule BPCC ENGR to meet prospective high school students and parents at enrollment functions 20%

Closing Remarks

- Dr. Holly French Hart thanked the BPCC team for their leadership. The past 18 months has been a challenging time and appreciates Dr. Schneider for her very innovative approach in

supporting the students and expressed her appreciation to Megan Bange and Paul Spivey for their support. She thanked the board for their expertise and dedication to help make our program succeed.

Meeting Adjourned 1:27

Minutes submitted by: Jeanne Smith

Minutes approved by: Dr. June Schneider