# 1.0: PROGRAM DATA AND RESOURCE REPOSITORY

## 1.2: QUANTITATIVE AND QUALITATIVE DATA

All programs are provided with the most recent three years of data by the Office of Institutional Effectiveness, Planning, and Research (IR) as wellas three-year budget data provided by the Financial Service Office. The budget data will typically be available in mid-September after final reconciliation of the previous fiscalyear.

There is no user entry required for this section unless the program faculty wish to include other data pertinent to program review, planning and development. Programs should spend some time reflecting and discussing the data elements prior to proceeding with the completion of the remaining sections. Program faculty are encouraged to include other data as desired. (*See Resource A for data set specifics and suggestions for further data collection/evaluation.*)

### Narrative:

Data was requested for students and faculty in major classes as well as upper level math and science. I should be noted that with the exception of Engineering Physics, other majors could be in Calculus and Chemistry. It should also be pointed out that the data includes students and faculty at high schools. While theses students are most likely not declaring majors yet, they are a possible future pool of students to contact regarding STEM courses and programs.

### Evidence:

- [Copy of EGT Sections AY17](#)
- [EGT Assessment Data AY 2017](#)

| ADEMIC_YE | ADEMIC_TE | DEMIC_SES | EVENT_ID | SECTION | NT_MED_N | CREDITS | ADDS | ERSON_CODE_ |
|---|---|---|---|---|---|---|---|---|
| 2016 | FALL | FULL | 01DDT1003 | 0001 | ENG GRAPH | 3 | 2 | M. Ramoni |
| 2016 | FALL | FULL | 01DDT2023 | 0343 | INTRO TO ( | 3 | 9 | M. Ramoni |
| 2016 | FALL | FULL | 01EGT1002 | 0347 | ENGINEERI | 2 | 10 | M. Ramoni |
| 2016 | FALL | FULL | 01EGT1013 | 0349 | CAM | 3 | 7 | M. Ramoni |
| 2016 | FALL | FULL | 02MAT1055 | 0696 | CALCULUS | 5 | 15 | B. Southworth |
| 2016 | FALL | FULL | 02MAT1055 | HS01 | CALCULUS | 5 | 5 | K. Longpine |
| 2016 | FALL | FULL | 02PHS1025 | 0584 | COLL CHEM | 5 | 7 | S. Rutherford |
| 2016 | FALL | FULL | 02PHS2055 | 0586 | ENG PHYSI( | 5 | 6 | M. Saleh |
| 2017 | SPRING | FULL | 01DDT2043 | 0001 | CAD2D | 3 | 3 | M. Ramoni |
| 2017 | SPRING | FULL | 01EGT1002 | 0001 | ENGINEERI | 2 | 8 | M. Ramoni |
| 2017 | SPRING | FULL | 01EGT1023 | 0001 | ENGINEERI | 3 | 7 | M. Ramoni |
| 2017 | SPRING | FULL | 01EGT2003 | 0001 | COMP AID | 3 | 3 | M. Ramoni |
| 2017 | SPRING | FULL | 01EGT2013 | 0001 | ENG MECH | 3 | 2 | M. Ramoni |
| 2017 | SPRING | FULL | 01EGT2023 | 0001 | MAT & MA | 3 | 3 | M. Ramoni |
| 2017 | SPRING | FULL | 02MAT1055 | HS01 | CALCULUS | 5 | 4 | J. Seidel |
| 2017 | SPRING | FULL | 02MAT1055 | HS02 | CALCULUS | 5 | 20 | T. Holehan |
| 2017 | SPRING | FULL | 02MAT2025 | 0786 | CALCULUS | 5 | 8 | B. Southworth |
| 2017 | SPRING | FULL | 02MAT2025 | HS01 | CALCULUS | 5 | 3 | K. Longpine |
| | | | | | | 68 | 122 | |

| Completed | ed (D or better) | % Complete | % Passed |
|---|---|---|---|
| 2 | 2 | 100.00% | 100.00% |
| 9 | 9 | 100.00% | 100.00% |
| 10 | 9 | 100.00% | 90.00% |
| 7 | 7 | 100.00% | 100.00% |
| 12 | 11 | 80.00% | 91.67% |
| 5 | 5 | 100.00% | 100.00% |
| 7 | 7 | 100.00% | 100.00% |
| 5 | 5 | 83.33% | 100.00% |
| 2 | 2 | 66.67% | 100.00% |
| 8 | 6 | 100.00% | 75.00% |
| 7 | 6 | 100.00% | 85.71% |
| 3 | 3 | 100.00% | 100.00% |
| 2 | 2 | 100.00% | 100.00% |
| 3 | 3 | 100.00% | 100.00% |
| 4 | 4 | 100.00% | 100.00% |
| 20 | 20 | 100.00% | 100.00% |
| 7 | 6 | 87.50% | 85.71% |
| 3 | 3 | 100.00% | 100.00% |
| 116 | 110 | 95.08% | 94.83% |

EGT Assessment Data AY 2017

**Number of Faculty:**

3 full time (M. Ramoni, B. Southworth, M. Saleh)

4 part time (K. Longpine, J. Seidel, T. Holehan, S. Rutherford)

**Enrollment & Student credit hours by Faculty type:**

Full time: 43 total credit hours taught, with 83 total student enrollments

Part time: 25 credit hours taught, 39 total student enrollments

**Average Class size:**

6.78 students in Face-to-Face classes

0 students in online classes

6.78 students across all program courses

**Completion rates:**

95.08% face-to-face

N/A online

95.08% all program courses

**Pass rates (D or better):**

94.83% face-to-face

N/A online

94.83% all program courses

**Number of Majors:** 6 AS EGT (2 AS EGT returned Fall 2017)

**Degrees Awarded:** 1 AS EGT

# 3.0: ASSESSMENT OF STUDENT LEARNING OUTCOMES

## 3.2: SIGNIFICANT ASSESSMENT FINDINGS

In this section the program should provide a narrative overview of the program's significant student learning outcomes assessment findings, any associated impact on curriculum, as well as any ongoing assessment plans. The program may attach data charts, assessment reports or other relevant materials. *(See Appendix 2 for ICC SLO's and Resource C- for more information.)*

### Narrative:

Faculty have worked to update outcomes for the major and general education courses in this program to ensure measurement of student learning is reflective of current industry needs and standards. Often this reflection leads to the need of a different style of teaching or perhaps even a different course. Faculty continue to discuss the types of courses and assignments that will provide the best outcome for positive student learning.

The faculty member who was responsible for teaching the major core and elective courses has left ICC. Members of STEMB division have discussed these findings.

# 4.0: EXTERNAL CONSTITUENCIES AND SIGNIFICANT TRENDS

An important component of maintaining a superior program lies in awareness and understanding of other possible factors that may impact the program and/or student outcomes. After consideration of these other factors, program faculty should document the relevant information within this section. As applicable, this should include the following. (*See Resource B for more information and other examples of external constituencies that may apply to both career and transfer programs.*) Program Advisory Committee, Specialized Accreditation, etc.

# 4.1: PROGRAM ADVISORY

Create a form in this section to include Advisory Member Name/ Title/ Organization/ Length of Service on committee; note the Committee Chair withan asterisk(*).
Upload meeting minutes from the previous spring and fall semesters.

## Narrative:

With the faculty member leaving it is unclear what happened to the minutes or meeting notes, if there were any. This is an AS transfer degree and as such may not have had a formal advisory committee.

The computer science faculty who took the responsibility for the program has visited with FAB LAB ICC staff members to help determine if the existing program is what is needed/wanted by the industries. This faculty member has also done some research ia to transferability. While there is a 2 + 2 program with Pittsburgh State that is very robust, there is concern that any student not wishing to attend PSU could be harmed by the current program.

The computer science faculty has also visited with students indicating a desire to get an engineering degree, as well as the admissions department. Findings have been that many students are still unclear where they will transfer to.

## 4.2: SPECIALIZED ACCREDITATION

- ○ Include Accrediting Agency title, abbreviation, ICC contact; Agency contact, Date of Last Visit, Reaffirmation, Next Visit, FY Projected Accreditation Budget.
- ○ Upload the most recent self-study and site visit documents.
- ○ Upload agency correspondence which confirm accreditation status.

### Narrative:

No outside specialized accreditation applies to this program.

## 4.3: OTHER

See Resource B for examples of external constituencies that may apply.

## Narrative:

During the 16-17 academic year a 2 + 2 was signed with Pittsburg State University. There have been discussions with Wichita State University about the possibility of a 2 + 2. The concern remains that unless a student knows for a fact they are transferring to a school with which the degree is aligned that students could be more harmed than helped. It is possible students would be better off we offer them a general pre-engineering degree that will more broadly transfer. Students do desire "fun" engineering courses. It may be less harmful to include one hands-on engineering program course each semester than to have a degree full of courses that only transfer to one or two institutions.

This program is an approved KBOR program.
ICC is accredited by the Higher Learning Commission (HLC) and this program and its courses fall under that accreditation.

# 7.0: PROGRAM PLANNING AND DEVELOPMENT FOR STUDENT SUCCESS

## 7.1: NARRATIVE/REFLECTION ON QUALITATIVE AND QUANTITATIVE DATA AND TRENDS

Thoughtful reflection on the available assessment data is key to effective and meaningful action planning.In this section program faculty should provide a narrative reflection on trends observed in the data from section 1.0. (*See Resource C*)

### Narrative:

The faculty member teaching major core and elective courses in 16-17 left ICC in the early fall of 2017. Existing faculty and administration have worked to meet the needs of the returning students until a permanent decision can be made. A computer science faculty member has agreed to oversee the existing program and teach, or to help in the recruitment of adjunct faculty to teach courses needed to help these current students successfully complete.

Completion and pass rates for all program courses are in the mid 90%. The average class size was just under the ICC minimum of 8 students. With 6 declaring the major during 16-17, 1 did graduated and 2 have returned to finish. It is unclear what happened to the remaining 3 students. During the 16-17 year there were no program courses offered online.

# 7.2: ACADEMIC PROGRAM VITALITY REFLECTION, GOALS, AND ACTION PLANS

The program vitality assessment, goals and action planning are documented by completing the ProgramSummative Assessmentform.

Programs should use previous reflection and discussion as a basis for considering program indicators of demand, quality, and resource utilization and a program self-assessment of overall program vitality. (*See Resource D for detailed descriptions of the vitality recommendation categories*.)

Programs will also establish or update 3 to 5 long-term and short-term goals and associated action plans which support student success. These goals should include consideration of honors, co-curricular and faculty development activities. Long-term goals are considered to be those that extend 3 to 5 years out, while short-term goals are those that would be accomplished in the next 1 to 2 years. Additionally, programs should update status on current goals. Programs should use

S.M.A.R.T. goal setting for this purpose. *(See Resource E on S.M.A.R.T. goal setting; Resource F on Action Plans for Student Success; and Resource C- for more information.)*

## Narrative:

With the loss of the full-time faculty member we need to determine if resources should be redirected or if a new faculty member should be hired.

Reflection of the information in this program review document and in conversations held with STEMB division members and the admissions department have led to the following goals:

This should be a Category 4 with specific information of how we will still meet student needs as well as mission and vision below:

1. The existing program should be phased out or put on hold.

2. A Pre-Engineering program should be developed.

3. The Pre-Engineering program could be a tract falling under the Math and Physical Science Degree.

4. The design or engineering electives offered to students should provide the students with an opportunity to apply knowledge gained from other course work to real life projects. (Examples: design and develop a piece of equipment needed by Fab Lab; asses a problem and plan the solution ie: 3-d printed hand for area and automate the hand using muscle wire or other techniques determined by students) These types of classes will allow students to see the value of completing other course work. These will not be lecture courses or read and test courses. These are complete hands-on project based learning courses.

5. With the proposed re-design of Small Business Mgmt to Fab Force/Small Business Mgmt we plan to offer a variety of tracts students could focus on. One of these could be engineering tech with a possibility of aligning this with a 2 + 2 similar to the alignment the computer science program has with KState to allow those students who want to transfer into Engineering Tech and opportunity to do so.

5. Look into the creation of a student club/group that focuses on design and development. Perhaps host events to invite other schools' engineering/computer science/business students. There could be contests, collaborative problem solving opportunities, etc.

6. Permanently assign an existing full time faculty member to focus on these and to develop other ideas and collaborate with STEMB and Fab Lab ICC to accomplish goals. This faculty member should come from STEMB: computer science or business.

# 8.0: FISCAL RESOURCE REQUESTS/ADJUSTMENTS

## 8.1: BUDGET REQUESTS/ADJUSTMENTS

Based on program data review, planning and development for student success, programs will complete the budget worksheets to identify proposed resource needs and adjustments. These worksheets will be available in October. *(See Resource G for more details on possible items to include.)*

### Narrative:

Budget requests are as follows:
1. Not hire a new employee (save salary and benefits)
2. Consider moving the salary of one computer science or business instructor to an Academic Innovation budget. This instructor will be working with the STEMB division to collaborate ways all programs can help each other. This instructor will be teaching courses that fit into multiple STEMB programs in order to maximize the resource.
3. Consider providing $2,500 in instructional supplies to this budget. This can help defray costs associated with materials/supplies for the hands-on project classes.

### Evidence:

- [Copy of 1268 Eng Tech 16-17](#)

INDEPENDENCE COMMUNITY COLLEGE
Drafting-Engineering
For the Twelve Months Ending Friday, June 30, 2017

| | | Published Budget | Operating Budget | Expense | Encumbered |
|---|---|---|---|---|---|
| 12-510:550 | Salary | | | $66,983.30 | |
| 12-591:598 | Fringe Benefits | | | 19,318.15 | |
| 12-601 | Travel | | | | |
| 12-602 | Food and Meals | | | | |
| 12-606 | Student Travel | | | | |
| 12-607 | Rentals | | | | |
| 12-611 | Postage & Shipping | | | | |
| 12-613 | Printing | | | | |
| 12-615 | Advertising | | | | |
| 12-616 | Promotions | | | | |
| 12-617 | Recruiting | | | | |
| 12-619 | Animal Food | | | | |
| 12-626 | Conference Fees/Registration | | | | |
| 12-631 | Telephone | | | | |
| 12-641 | Lease/Rental/Lease Purchase | | | | |
| 12-646 | Service Agreements | | | | |
| 12-647 | Fuel/Gas | | | | |
| 12-649 | Repairs | | | | |
| 12-661 | Contract Services | | | | |
| 12-662 | Legal Services | | | | |
| 12-663 | Consultants | | | | |
| 12-681 | Dues/Memberships/Fees | | | | |
| 12-682 | Subscriptions | | | | |
| 12-699 | Uniforms | | | | |
| 12-700-000 | Instructional Supplies | | | | |
| 12-700-001 | Instructional Supplies (Innovation Fee) | | | | |
| 12-701 | Office Supplies | | | | |
| 12-702 | Paper Supplies | | | | |
| 12-703 | Books | | | | |
| 12-704 | Periodicals | | | | |
| 12-705 | Media (Videos, DVD) | | | | |
| 12-717 | Professional Development | | | | |
| 12-719 | Misc. Expenses | | | | |
| 12-850 | Equipment- Non-Capital >$5,000 | | | | |
| 12-852 | Software & Licenses | | | | |
| | **Total** | | | 86,301.45 | |

Remaining

($66,983.30)
(19,318.15)

**(86,301.45)**

# 9.0 PROGRAM PLANNING AND DEVELOPMENT PARTICIPATION

## 9.1: FACULTY AND STAFF

In this section programs will provide a brief narrative of how faculty and staff participated in the program review, planning and development process.

### Narrative:

Full-time faculty member previously in charge of this program left ICC in early fall 2017. A computer science faculty member agreed to take the responsibility for completing the program review, planning and development process.

Discussions have taken place with Fab Lab ICC staff, admissions, advising, VPAA, other faculty, and students regarding opinions and ideas for the success of this program.

## 9.2: DEAN AND/OR ADMINISTRATIVE DESIGNEE RESPONSE

After review and reflection of the program review, planning and development, the Division Dean will complete Dean's Summative Assessment form. The Dean's response will be available to programs for review and discussion prior to beginning the next annual planning and development cycle.

### Narrative:

I agree with this program review. Although, I am not sure of our ability to meet the budget requests at this time. Brian Southworth STEMB Division Chair. 2.15.2018