## Bellingham Technical College Advisory Committee Fall Meeting Minutes

Program: Instrumentation and Control

Committee Chair: Tony Shockey

Meeting Date/Time/Location: 23OCT2018, 6:30 PM, DMC 130 Members Present: Tony Shockey, Bill Stuckey, Richard Horne

Faculty Present: Tony Kuphaldt, Matt Ziels Student Present: Kyle Morris (Note-taker)

Meeting Called to Order: 6:31pm Meeting Adjourned: 7:50pm

Agenda Topic: Welcome and Introductions

**Discussion Summary:** 

Meeting Announcement Lead time -- ~3 months

Recommendations and/or voting items:

Agenda Topic: Approval of the Previous Meeting's Minutes

Discussion Summary:

Recommendations and/or voting items:

Minutes -- Approved

Agenda Topic: Committee Member Updates

Discussion Summary:

Tony S. - Fluke Corporation

- Increase in wireless, thermography, and predictive instrumentation
- Imaging of gases through thermal imaging
- Tony K question: changing role of an instrument tech with "big data" and tools?
  - Build out use cases for "big data"
  - Technician application of "big data" to determine root causes
  - Creating synthetic baselines with smarter technology
- Job Forecast:
  - Sales and Marketing High
    - Technical knowhow always needed
    - Building technical demos and hands on applications

## Richard H. - Williams Pipeline

- Cybersecurity Hot topic
- Job Forecast:
  - Hiring for non-local jobs

## Bill S. - Anvil

- PLC replacement
  - Old units have reached EoL replacing with newer units
  - Some wireless avoided for vitals, preferred for maintenance
- Job Forecast:
  - Currently slow

Agenda Topic: Program Report

Discussion Summary:

- Staffing changes:
  - New Instructor: Matt Ziels
  - o Instructor Departure: Bobby Yost
  - New Dean: Ray Kubista
- Three current instructors
  - o Tony K.
  - Matt Z.
  - o Dave S.
- Not enough instructors for 2 cohorts
  - Current plan: flip-flop a 2nd year instructor for 1.5 cohorts/2 years
  - Possibility to return to 4 instructors
  - Focus on quality graduates
- Possibility for a complete overhaul of the first year curriculum
- Current student enrollment:
  - 25 first year
  - 33 second year
    - 2 graduating DEC2018
    - 10 graduating MAR2019
    - 21 graduating JUN2019
- Education for non-program students
  - More Avil employees likely to take INST 250 in JAN2019
  - Room for more Anvil in spring quarter
  - Contract training at Andeavor/Marathon refinery in the summer
- Job placement:
  - JUN2018 60% hired in the field, 40% no contact
  - MAR2018 7/12 confirmed, 5 no contact
- Recruitment (inbound):
  - Icicle Foods
  - o Shell Pipeline
  - AECOM
  - Barron Heating
- Job Shadows & Internships
  - Spring break 2018:
    - (4) City of Bellingham

- (6) NAES cogen power plant in Ferndale
- (2) Williams Pipeline in Sumas & Mount Vernon
- (2) WSU Extension Center lab in Mount Vernon
- Summer Break 2018:
  - (2) BP Cherry Point refinery
  - (8) City of Bellingham
  - (1) Williams Pipeline in Sumas
  - (1) Kenny Electric in Denver, CO
- Grand Coulee Dam Tour
- Instructional Developments
  - New TROUBLESHOOT computer software
    - Simulates faults in circuits and records steps taken for review with an instructor
  - First year curriculum plan:
    - Q1 focus on DC electronics and simple semiconductors
    - Q2 focus on AC and additional simple semiconductors
    - Q3 focus on analog and logic systems (analog semiconductors, digital gates, PLCs, and motor controls)
    - Less focus on analog circuit theory, more focus on circuit fundamentals, electric power, and troubleshooting
    - Open source materials (no purchased textbooks)
- Donation requests:
  - None currently

Agenda Topic: Dean's Report

Agenda Topic: Student Report

Discussion Summary:

- Continually building on fundamentals
- Inverted format allows students to target the areas where their understanding is weak
- Students transitioning from 1st to 2nd year appreciate having advanced students for help

Agenda Topic: Next Meeting Date

Discussion Summary:

• Tentatively scheduled for Thursday 16MAY2018, 11am - 1:30pm

Agenda topic: Survey Outreach

Discussion Summary:

- Email inboxes are inundated with emails
- Surveys should be short (~10 questions)
- Emails direct from instructors are more likely to be answered

Meeting Adjourned at 7:50pm