Manufacturing Advisory Committee

Tuesday June 13, 2023,
8 a.m. – 9:30 a.m.
McNaughton Room, 2150 (Automotive Building)
& Via Zoom

MINUTES

Industry Attendees:
Travis Moore, VP, JEMCO
Blake Stone, Royell Manufacturing

SCC Attendees:
Guy Hamilton, Executive Dean, Workforce & STEM
Dalila Paredes, Associate Dean, Workforce & STEM
Keith Smith, Professor, Manufacturing
Wanda Waldrop, Career Navigator, Manufacturing
Lisa Smith, Secretary Senior, Minutes (note taker)

Minutes Approval: No Quorum to approve (5/10/22 & 12/6/22) minutes at the meeting.

General updates from campus - (Guy)
Guy reported Program and College updates.

Student updates from Wanda
We will have 3 of our Graduates walk and multiple students who entered employment.

Status of the building - highlight of the new equipment (Keith)
Keith summarized attributes and benefits of the new building verses the old - now three stories, very modern looking and lots of windows. Presenting a visual map of the first floor, he explained where the machine shop, classroom space, CNC machines, metrology and robotics, tool rooms, etc. are located.

Keith said they would sell the old CNC machines from the early 90's, because they take up much workspace. The new workspace is slightly smaller, so they decided they would purchase three smaller (TMO) HAAS machines. They have a smaller footprint but have everything needed to teach students.

Keith also described the modern mechanical upgrade and many perks that come with this machine, such as play videos, or display pictures (descriptions of the set-up).
Discussion:

- Blake asked if Keith has a company lined up to purchase fixturing that would offer a good community college discount.
  Keith said they're in fairly good shape, but some of the vices are worn out and it would be a good idea to investigate. In more recent years Keith purchased a 5-Axis machine and a one 4-Axis Machine.
- Guy asked if there are thoughts about the student experience: going through the 105, 106 and 120 classes, in terms of working in a smaller space and with less or different equipment.
- Keith said there would be a couple less CNC machines, but he envisions more team assignments at Georgetown. Currently this is working out very well. Swapping teams is also effective so they don't get too comfortable with each other. There are also enough manual machines for the program.
- Travis asked how soon the 4-Axis machines might be allocated.
- Keith answered that there are a couple 4-Axis machines and one 5-Axis machine and doesn't feel much pressure to invest in more 4-Axis machines yet. Keith also wants a feel of the new but smaller CNC machines, what kind of attachment to add to them.

Upgrading the tool room – vending machines for the tool room (Keith)

- Keith explained that historically, the expectation was to keep the shop clean, and they've always done a good job. It's a matter of setting up that expectation and making time at the end of the day to clean up.
- The difficult thing to organize is tooling. One of the ideas to help this task is issuing small toolboxes to each student, which provides 90% of what they need on a regular basis. The cutting tools are the challenge.
- As a result of the cutting tools challenge, Keith and Ben did tours of different shops. We discovered 2 things that stood out. The were:
    1. The shops all had a tool Management system that were tracking the tools and showing their locations. We decided to go with a cabinet system that had drawers. Many cutting tools can fit in these drawers.
    2. This system also includes a large scanner to help identify student ID's, and the job.
       This will also track inventory and when students have trouble and go through so many cutting tools a day. It could also help instructors with ways to improve teaching methods.
- Discussions: Blake inquired if the program uses A Self-Stock System vs. a manufacturer's stock system, and metals used for cutting. Blake shared that on their aluminum machines they change tools well before they're needed and have thousands of dollars of cutters that are 10 - times the sharpness required. Instead of recycling the cutters, Blake would work with the owner to separate the cutters and send them down to schools when needed. Blake asked for an idea of the

kind of cutters needed. Keith was very happy and shared specifications of what tools would be needed. This would save thousands of dollars.

- Keith continued: we're looking at a $9500-dollar (CRIB) system, and a game plan to stock cut metal ahead of time in drawers for projects. Students would have to scan in for the stock and would track and account for supplies if used excessively. Everyone agreed that $9500 is reasonable, would more than pay for itself and student time, and is a streamlined system.
- Keith discussed Tool Pre-Setters: All shops have them, but they are very costly. Keith hoped to find an old one in a shop that's not being used, but there was not a green light response. After thinking it over, Keith thought of asking the committee to donate old, unutilized Tool Pre-Setters.

Hiring instructor for the inspection program - support for finding a new instructor from industry, bring in a job description and MCO

A discussion occurred about hiring an inspection instructor.

Meeting Adjourned: 9:14 am, LS