**Career Education Advisory Meeting Notes:**

**Advanced Manufacturing, Engineering, & GIS**

**Friday, September 17th 9:15 am – 10:30 am**

ATTENDEES:

* **Hal Edghill -** MSJC MakerSpace Specialist – Facilitator of Career Education Advisory Meeting for Adv. Manufacturing, Engr, GIS Breakout
* **Jenni Huter** - CTE Program work-based learning Temecula Valley Unified School District (TVUSD) – 2 manufacturing pathways –articulation agreement seeking for manufacturing pathways – spoke with James Bae previously
* **Roy Mason** – MSJC Chair of GIS dept. - developing the GIS program certificate –
* **Avante Simmons –** MSJC Director of Strong Workforce Program; works with Jeremy Sparks, Hal Edghill, and Roy Mason to help fund program developments
* **James Bae** – MSJC consultant and associate faculty for engineering dept.
* **Jeremy Sparks** – MSJC Transportation & Scheduling Coordinator, works with Hal in MakerSpace
* **Iroberto Pimentel** - (was not able to get his Microphone to work)
* **Thomas Windmiller** - (did not speak up)
* **Nelida Romero** - Hemet Unified High School - pathways secretary
* **Shane Sands** - Vista Murrieta High School - assistant principal -
* **Karla Lazcano** – MSJC Admin. Assistant to Avante Simmons – Scribe for Career Education Advisory Meeting for Adv. Manufacturing, Engr, GIS Breakout

NOTES:

* **Roy Mason:** R. Mason is working on adding Drones to have an application track to the MSJC certificate.
	+ This program can articulate with many other programs at MSJC like Dig. Media – flying drones is a hot thing so it will attract some of our students that they never looked at before
	+ R. Mason working on getting this to some of the high schools like Murrieta High School
	+ These commercial drone pilot classes will have a lot of pull as it will prepare students to take test;
	+ Currently working on having SWP funding to get drones and cameras
	+ Fall 2022 is the hope to start the GIS program in full effect
* **Jenni Huter:** J. Huter has been in contact with James Bae about Engineering Program and is wanting to know updates on the progress.
	+ They have revamped engineering curriculum and TVUSD is articulated with MSJC
	+ Rancho Vista and Chapparral has 2 course Intro Engineering and concentrator capstone courses and currently writing a capstone ; hired a new teacher on to keep aligning to
	+ Currently TVUSD already has 20 articulation agreements with MSJC and wish to have it grow
* **James Bae:** Update on Engineering Curriculum based on J. Huter’s inquiry:
	+ Have Good and Bad news - Plans remain the same
		- Curriculum development ideally would have started last spring but did not have access to curriculum access of choice (Curricunet) and is now CourseLeaf;
		- Documentation of curriculum is ready but since the curriculum requires less than 3 or 4 reviews and Committee meets twice a month, J. Bae thinks it might be a bit of a slow process to get it fully approved.
		- May have a Spring 2023 launch but once curriculum is set up can get up and running with articulation –
		- Advises J. Huter to look at Norco for articulation in their program to prepare
			* Norco’s curriculum is in alignment with what MSJC is going for.
		- MSJC has initial line up for Information Tech 1-4 (17 courses – 4 program certificates )
			* Some students currently taking intro to Engineering and hopefully take classes in the Spring 2022
		- J. Bae beefing up program to turn into where it can go into GIS with Roy Mason.
		- J. Bae looking to pay for students AutoCAD certification
			* Solidworks certification is offered for free and pushes students to take it
			* AudoDesk company is a different certification has 3-4 levels and pushes to offer up to professional level and goes by hours of experience in the program.
				+ Pushing for this Certication next month (October 2021)
* **Avante Simmons** - gives kuddos to James Bae about articulation and make sure direct pathways are happening at TVUSD
* **Jenni Huter** – J. Huter menitons K-12 doesn’t use Solidworks because it’s cost prohibited
	+ Instead K-12 uses Fusion360 (from AudoDesk company) for Engineering exploration
	+ J. Bae mentions that students getting experience in Fusion360 will be in a great position to be in the AudoCad program later down the road
		- Fusion 360 is highly accessible and recommended
			* Highschool institution club hours can work together to get the h.s. exposure earlier and to push for articulation and dual enrollment
* **Von Lawson** – provides a thank you for coming to advisory meeting
* **Jenni Huter** – asks is there a place as a k-12 partner to better prepare students for associate degree?
	+ Using SWP K-12 funds to identify if it’s appropriate industry wide recognized certifications
* **James Bae** – responds to J. Huter that both Jeff and Jesus (MSJC professors) are teaching asynchronous classes which are online anytime.
	+ Online means there is opportunity for dual enrollment if they had good connection
* **Avante Simmons** – mentions that there is a desire for K-12 and community college goal for SWP
	+ For concurrent enrollment and it would just be a memorandum of understanding (MOU) and need to know who would champion that effort
* **James Bae** – For example, Leo has been contracted at MSJC to develop the logistics program and curriculum is in progress, but it will be happening
	+ Leo Medina has been doing a lot of work in education and logistics
		- This logistics management program is the beginning of an operations management program
		- Building supply chain has implications for CIS and Robotics
			* APICS certification (from the Association for Supply Chain Management) provides different levels of certifications aligning to our programs’ pathways
		- logistic program approved in the Spring 2021
	+ J. Huter mentions that TVUSD doesn’t have logistics
* **Nelida Romera** – is the secretary of pathways at Hemet Unified High School District- secondary pathways specialist
	+ HUHSD have classes that have used drones – drones with viticulture to find out temp. - get ways of using tech.
	+ Agree with Roy Mason that there are so many areas you can expand to with GIS
		- Have to make sure you have parameters for what you teach in GIS as there is so much
		- R. Mason would like to talk to Nelida Romero to connect with Lara Gallardo, director
	+ **Roy Mason:** does compass work and workes with surveyors in training in his wife’s high school
	+ **Nelida Romera:** at HUSD they have labs so the high school students can experience different areas within CTE’s
	+ Nelida took her kids to the to MakerSpace in Menifee snd they were so excited!
* **Roy Mason:** GIS and Drone update on MSJC curriculum
	+ Having problems with Curriculum currently
	+ renovating brand new space in San Jacinto Bldg 100 for GIS classes
	+ Spring 2022 GIS classes will be on campus, this Fall there is only online
	+ The GIS certification 18-24 units and excited to get the degree back up and running
	+ Cal State Northridge only college that has a Bachelor’s degree and R. Mason is looking to have an articulation with them
	+ The drone track is exciting; currently submitting 4 courses for this
		- working with Dig. Media dept looking at including their courses intho their track
			* how to take images
		- Also, looking at safety courses like police and fire tech, water tech that all can have drone classes along with those
			* So many organizations are using drones now
				+ Surveying is huge with notes
			* Applied to SWP Round 6 to purchase drones for students and for surveying classes
				+ R. Mason suggests perhaps having GIS in the new Makerspace; use those funds to go into the current Menifee MakerSpace for GIS and drone workshops
* **James Bae** – asks R. Mason if he is planning on having drones photo or drones based Lidar?
	+ R. Mason mentions that there will be drone imaging 1&2
		- 1 will be intro (what cameras are there)
		- 2 will be more in depth
	+ J. Bae is hoping to do an imaging and data processing to get them ready for 360 view of modern surveying
	+ R. Mason would like to have Ezri program to do similar to Global Mapping systems
		- The software that can get expensive though
		- Also, what level can we do teach our students?
			* More of where/why it’s used rather than learning how to use it
* **Shane Sands** – assistant principal - Vista Murrieta High School
	+ R. Mason would like to work with Vista Murrieta
	+ Engineering teacher will get in contact
	+ **Tom Oxford** – Comments that the Makerspce is wonderful but advises to get more 3-D printers
		- Knows Director Lara at HUSD as counterpart for the apprenticeship and is excited to see development
	+ J. Bae to T. Oxford - is too late for students to sign up for ENG 154?
		- T. Oxford mentiones that people cannot enroll to classes this semester but they can sign up for the apprenticeship program
			* have interested people email apprenticeship@msjc.edu