

Cerritos College CTE Program Report, Spring 2020

Program: PLASTICS MANUFACTURING TECHNOLOGY

Division: TECHNOLOGY

Attached is a copy of the Annual Unit Plan for:

Submitted by: Miodrag Mlcic

Date:

1. **Objectives: What are the objectives of the program?** To what extent are these objectives being achieved? How satisfied are students with their preparation for employment? How satisfied are employers with the preparation they receive in this program? Does this program contribute to programs in other fields? What plans are in place for improving the program?

Objectives of the Department of Plastics Manufacturing Technology is to educate composites and thermoplastics manufacturing and inspection technicians, in order to satisfy local needs for a qualified mid-level workforce in the aerospace, advanced automotive, and medical devices industry. Our graduates of composites programs are highly sought after by local aerospace manufacturers, and most of them end up with the jobs at the Northrop-Grumman, SpaceX, Boeing, GKN, and other prime aerospace manufacturing entities in South California. Employers are very satisfied with the quality of our graduates, and our major bottleneck is increase in popularity of program/ increase in admission in order to satisfy the local needs. All of the part time instructors are current aerospace manufacturing engineers, and our IAB consists of representatives of major employees. The program contributes to ENGT, NPD and ET program through the inclusion of PMT100 class into the respective curriculums.

2. **Market Data Need: How strong is the demand for graduates of the program?** How has demand changed in the past two years and what is the outlook for the next five years. How many jobs are available regionally in this field? Are other similar programs offered in this region and if so, what is their impact on the job market? How is the job market impacting your program?

The demand strongly outpaced the supply of the qualified graduates. With a ramp up of production of F-35 program, and with the increase in commercial space launch activity, the demand for the composites manufacturing and composites inspection technicians is expect to significantly increase. With the trend of on-shoring of production of general merchandise due to tariffs, and current geo-political global situation, it is expected that the demand for plastics injection molding technicians and moldmakers will start increasing too. The closest similar program to Cerritos is located in Antelope Valley College, and does not geographically affect South Bay students. Even with COVID-19 shutdown, the demand for our graduates is very strong, and in a recent months we have placed more than 20 students at prime aerospace manufacturing enterprises. The market data

on composites can be found here <http://compositesmanufacturingmagazine.com/2020/01/2020-state-of-the-industry-report/>

3. **Enrollment/Retention/Placement: What are the trends in student enrollment, success and completion, and placement?** Is there an increase or decline in the last five years? What are the barriers to success and completion? What are placement rates with local employers? What do these data mean for your program?

Since program initial modernization and hiring of a well qualified part time faculties, and investment in new equipment through the Perkins and Strong Workforce, we have seen an increase in enrollment in the last two years. The major barrier to success of completion of program is a premature hiring by local industry of students before completing a full certificate. Placement rate for graduates is practically 100%. Or biggest obstacle to address is enrollment expansion within traditional students, and diversification by inclusion of higher number of female program participants.