Automotive Engineering Education Curriculum That Meets the Competency Needs of Vocational School Teachers and Industrial Competencies

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ABSTRACT

This study aims to capture the competencies needed by the world of work (SMK and the automotive industry) that are in accordance with the profile of graduates of the Automotive Engineering Education FT UNY. The competencies obtained are then integrated into courses in the curriculum. The research was designed with a combination of descriptive qualitative and quantitative concepts, using interviews, questionnaires and FGD methods. Based on the results of the research, it is known that: (1) The competency of vocational education that must be possessed by the graduates of the Automotive Engineering Faculty of Engineering UNY Bachelor of Education program required by the SMK is a basic mantra that builds personal competence, communication, technology management and managerial (class management); (2) Professional competences of Automotive Engineering science that must be possessed by graduates of the Automotive Engineering Education Bachelor program FT UNY are vehicle maintenance which consists of Quick Repair or Quick Service, basic mentalality, strengthening automotive Basic Knowledge, ethics and communication in industry, balance between knowledge and skills, basic electronics and digital competencies, managerial business sense skills, people management, communication skills and interpersonal interactions, leadership skills, listening to opinions, service marketing & promotion, market analysis, foreign language skills, such as English, and adaptability to technological developments, current; (3) The structure of the FT UNY Automotive Engineering Education curriculum that is in accordance with the graduate profile is to integrate personal competence in all subjects in each semester, the competence of gasoline and diesel engine engineering, automotive electricity and motorbike technology is placed in the first 4 semesters. While the fields of Chassis, body, heavy equipment, diagnosis, maintenance of vehicles and electric motors, Hybrid & Fuel Cell are positioned in semesters 5 and 6. Assuming that students have sufficient support competencies in semesters 1-4 which are filled with the 4 previous fields. This competency is very supportive if the Industrial Practice students are in semester 7. So, when students carry out industrial practices, they are ready because they have been equipped with sufficient technical competencies from learning on campus

Kata Kunci: Curriculum Structure, Competence