

# **PROGRAMMATIC PANEL REPORT**

**Course Areas:**

**Automobile Technology & Management**

**Craft Technology (Wood) with Business**

**April 2015, for**

**Cork Institute of Technology**

## **Programmatic Review. Panel Report on courses:**

1. Bachelor of Science in Automobile Technology & Management (Incorporating the Higher Certificate in Engineering in Automobile Technology & Management)
2. Bachelor of Science (Honours) in Transport Management
3. Bachelor of Science in Craft Technology (Wood) with Business

At the Cork Institute of Technology

### **Panel members:**

Chair: Ms Una Parsons. Head of Department of Mechanical and Electronic Engineering, Sligo Institute of Technology.

Mr Ciaran Kinahan, After sales Manager (Passenger cars), Mercedes-Benz

Mr David Tracey, Training Centre Manager (Joinery Works), John Sisk & Sons (Holdings Ltd).

Dr. Noel Barry, School of Graduate Studies, CIT (internal representative)

**Visit date:** 22th and 23<sup>rd</sup> April, 2015

### **Panel overview.**

At the start the panel wishes to thank all at Cork Institute of Technology for assisting the panel in conducting its business in an orderly and timely manner. The presentations made by Dr. Stephen Cassidy, Dean of Academic Quality Enhancement, by Mr. Matt Cotterell, the Head of School and by Mr Michael Hourihane, Head of Craft Section, informed the panel members early of exactly what was expected of them and the time frame. Course co-coordinators Mr. Clive Atkinson (Automobile) and Mr. Brian Thoma (Wood Technology) with their presentations focused on the core issues of the courses quickly, ably assisted by the various subject lecturers on the courses.

Frank discussions were had with the student representative, with eight attending. At the graduate student session, only students from the automobile side attended, the wood craft not yet having graduates. Various issues were raised by the graduates and these are reflected in the suggestions. Two industry representatives attended, one from a transport company and the second from a motor dealership distributor. One of the common themes was how appropriate the course is to their industry and how good generally the graduates are. One common aspect they would like to see improved is technical and report writing, relevant to the automotive industry. Other very noteworthy suggestions are included below also in the recommendation section.

A detail presentation was made on the proposed module changes and the reason for them, especially in the automobile side. Mr. Brian Nixon, Mr. Richard Carney and Mr. Pat O'Shaughnessy brought us through some of them, involving such issues as electric vehicles, hybrids, new legislation, hazardous goods transportation, current and proposed end-of-life legislation concerning the de-pollution and recycling of vehicles. The law, business and mathematic lecturers also attended and let it be known that they are happy to use examples from the automotive, dealership and transportation industry, where at all possible. The wood technology course will have its first graduates this year. Their course and book of modules did not need any significant revision and was more a matter of 'fine tuning' the modules. Mr. Thomas Murray brought us through the changes. One area where all had a lively discussion was in the area of course promotion and getting a higher visibility for it. A tour of the facilities was also undertaken. Everyone on the panel was impressed by the facilities and the laboratories in particular. One of the suggestions, on the automotive side, is to have a dedicated area for automotive auto-electrics, in which a secure and dedicated auto-electrical training area/department can be developed for the purposes of providing all auto electrical training to all students. This is of extreme importance as modern vehicle design and development has seen dramatic developments in the area of vehicle electronics. In addition the recent introduction of hybrid and fully electric vehicles by all manufacturers has resulted in very high levels of training and certification being required to comply with both manufacturing standards and European legislation.

A discussion was had on research in the areas. While little structured research is presently being undertaken, it was noted that individual staff members were themselves undertaking various postgraduate research degrees. Also research in such areas as electric vehicles was being undertaken by staff in the mechanical department. It is hoped that the area can grow organically in due course as staff themselves become active and new research staff recruited.

### **Automobile Technology and Transportation Course**

#### **Conclusions**

The panel has no major issue in recommending that these courses (L7 and L8) be approved for another full term (five years). The proposed changes are acceptable. However it has some suggestions and recommendations which the panel believe should seriously be looked at and possibly implemented over the next year or two. The suggestions are made for both courses (L7 and L8) as they apply to both in most cases.

#### **Suggestions and recommendations:**

1. Title: The word "automobile" should be replaced by "automotive" in the title of the level 7 course.
2. Dealer Management Systems (DMS) on the courses to be brought into line with the industry requirements. DMS systems play a vital role in the management and productivity of all automotive industry related businesses. DMS in their design and operation, control all workshop retail, workshop warranty, and parts trade/retail sales. In addition their functionalities include in-depth and detailed KPI and Business Management reporting, to include business forecasting and Marketing. Students completing such courses within CIT

should achieve very competent levels of DMS understanding and operations at the conclusion of their chosen course.

3. Course Modules must also focus in greater detail on key Business Management principles. The areas of workshop loading, workshop productivity, and overall After-Sales department Business Management, (to include parts sales management) must be reviewed and covered at appropriate levels so as to ensure all prospective students are 'Industry Prepared' and trained to a level of expertise that will make them both extremely employable and sought after within the Industry.
4. Modules delivered by service in lecturers, such as mathematics, to reflect in their examples cases from the automotive industry where at all possible.
5. Motor workshop module to be brought up to the industry standard.
6. More focus on the warranty side of the business in some modules. In particular, the course and relevant module should have a greater emphasis on current manufacturing and industry warranty standards. As all warranty related processes are strictly audited and controlled by manufacturers the relevant course module should reflect these operating and controlling principals.
7. Strengthen communications and interpersonal skills, especially with industry examples, such as CV writing, case writing studies on vehicle condition, (technical report writing), site visits to dealerships and transportation companies etc.
8. Students to be encouraged to be pro-active with their engagement with companies.
9. Guest lecturers, from both the graduates in the industry and other relevant personnel in the industry to be pursued.
10. More practical examples on air brake systems. (Relevant for students seeking employment within transport Industry)
11. A little more on HVC (new module should help here).
12. Dedicated location for automotive electrics to be provided.
13. Time on some practical modules to be increased, especially in first year. This it was felt would even out the intake, where some students are from the industry and others know little of it, when they first come in.
14. Consider pursuing a level 8 ab-initio degree with a project in one semester in year 3.

### **Craft Technology (Wood) with Business**

#### **Conclusions**

The panel has no major issue in recommending that this course be approved for another full term (five years). The proposed changes are acceptable. However it has some suggestions and recommendations which the panel believe should seriously be looked at and possibly implemented over the next year or two. It was felt by the panel that the course lecturers need to be in contact with industry representatives to ensure the graduates are relevant and current to the needs of the industry, as time goes by.

## **Suggestions and recommendations:**

1. Serious consideration should be given to a name change. The word “craft” in the degree title gives an incorrect impression of what has been undertaken by the graduate.  
Alternative possible names are:
  - a. BSc in Wood Construction and Management
  - b. BSc in Wood Technology and Management
  - c. BSc in Wood Technology and Business
2. Strengthen the linkage and connections with the industry and give better career guidance.
3. Students also take ownership of working on their own initiative outside of class with feedback links to class work.
4. Report writing, method statement training for preparation to meet industry demands.
5. Interview skills, CV writing prep work for the job market to be undertaken.
6. Possibility of more “on line learning” which is employer driven.
7. Consider a possible work placement on the course.
8. Clear user guidelines on the use of machinery is required, with consistency with due regard for H&S.
9. Consider providing CNC training for product production systems and large quantity manufacture.
10. FSC “Forestry Stewardship Council” and PEFC “Programme for the Endorsement of Forest Certification” training and certification to be provided within a module. The impact on how sources of raw materials plus the commercial impact on projects at all levels to be emphasised, including environmental and sustainability training. Working with materials that meet these standards e.g. accoyo wood, medite tricoya and durawood etc.
11. More promotion of the course needs to be undertaken, especially in feeder schools.
12. Final year project display and promotion needs to be undertaken in the College for the benefit of the industry and community.

## **Findings of Panel**

There are no conditions put on the approval of the courses and the courses are approved for the next five years. However it is envisaged that the suggestions in the main would be reviewed and if possible implemented. At the next programmatic review, it would be expected that they have been addressed, as best as resources allow.