

Best Practice cases IRELAND (Partners: InnovaWood and WIT)

Harvester Operator Course by Coillte 1 Training Centre, Mountrath, Co. Laois

Duration: 240h (Class room: 40 hours, Practical Work: 160 hours, Workshop: 40 hours)

The course for Harvester Operator was developed by the Coillte ²Training Centre, Mountrath, Co. Laois. The course has a Certificate of Competency from the National Proficiency Test Council (NPTC)³. The National Proficiency Test Council is one of the most widely recognised training schemes for tree work. Despite it being a UK based body it has a long history in Ireland. The course is graded at NPTC Level 2. Using National Framework Qualification (NQF) level indicators this corresponds to the Further Education and Training Awards Council (FETAC)⁴ Level 4- 5 module equal to European Qualification Framework level 4.

This course is aimed at people recently employed by a harvester/forwarder contractor. The employee would have limited practical experience. The aim of the course is to bring candidates up to a professional standard as an operator of a mechanical harvester.

The course objectives are:

- To make the candidate competent to carry out practically all tasks in relation to mechanical harvesting unsupervised and self-directed.
- To enable the candidate to carry out work in a safe manner and with minimum environmental impact .

At the end of the course the candidate will be able to:

- carry out harvesting operations in line with approved safety procedures with particular emphases on hazard identification, risk assessment and the role of the machine operator in the implementation of such policy
- have a thorough understanding of legislation, codes of practice, standard operating procedures relating to timber harvesting and related activities. interpret a harvest plan and associated documents.
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- monitor quality of work on harvesting sites in line with best silvicultural, environmental and economic practices and record finding as appropriate.
- operate the harvester in an efficient and workmanlike manner in thinnings and clearfell sites.

¹ Coillte is a commercial company operating in forestry, land based businesses, renewable energy and panel products. The company employs approx 1,200 people and was established in 1988. It owns over 445,000 hectares of land, about 7% of the land cover of Ireland. It is also involved in training, research engineering and forest nurseries.

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³ NPTC (www.nptc.org.uk)

⁴ As the national awarding body for further education and training in Ireland, the Further Education and Training Awards Council (FETAC) gives people the opportunity to gain recognition for learning in education or training centres, in the work place and in the community.

- maintain the base unit and associated equipment to the required standard as outlined in the machine operators manual.
- demonstrate competency in all aspects of a modern harvester computer system.

The teaching methodology consists of:

Class room activities

1. Code of practice for managing safety in forest operations. AFAG safety guidelines. Machine limitations. Hazard Identification and risk assessment. Accident reporting. Health and safety authority.
2. Forestry and the law. Forestry acts. Felling licences. Forest service guidelines. Coillte's code of practice on stump treatment, contract management. Access agreement. Forest Service and their role.
3. Sales proposal details. Site classification. Map reading, map scales, boundaries and symbols. Handover procedures.
4. Stem handling mode. Calibration procedures. Interpret production files (PRD files). Compile cutting instructions (APT files). Collect and transfer stem files (STM files). File management skills. Send and receive e-mails including attachments. Use of the computer system for: trouble shooting, setting up feed speeds, function speeds, operator specific settings, colour marking and urea application. introductory IT skills. Use of the computer system for: trouble shooting, function speeds, operator specific settings, colour marking and area application.

Practical Field Work and Workshop

5. Environmental impact appraisal. Timber sales and markets. Species recognition. Log specification and related values. Site layout and brash mats. Site monitoring form. Pollution control kit. Emergency planning. Transportation and storage of fuels and chemicals.
6. Identification of all controls, dials, gauges, warning signals and safety switches associated with the forwarder base machine and crane. Operate the machine on a range of sites for a minimum of 160 hours under the supervision of a fulltime instructor.

Workshop

7. Carry out daily, weekly, monthly and periodic maintenance schedules on the harvester as per the operators manual. Sharpen saw chains, maintain cutting bars, inspect cutting equipment to ensure that all components are properly aligned and operational as per the manufactures instructions.

Assessment and other course details

The assessment methods focus on practical knowledge. A participant is deemed to have reached the required standard when his/her hourly production is equal to or greater than 70% of that of the instructor. This is monitored on a daily basis from the production files received from the harvester on a daily basis. On successful completion of the training course the participant returns to the work place as a fully trained machine operator. National Proficiency Test Council competency assessment takes place in the work place at a later date when the participant reaches full hourly output.

Learner/Employer motivation: The employer is motivated to send employees to the course to ensure a level of qualifications that will satisfy Insurance companies and the Health and Safety Authority requirement to employ competent staff. Also the employer will benefit from the up-skilling of his employee. It is also very expensive to train the employee in-house as he will occupy a very expensive piece of equipment.

The course is advertised through local, national papers and forestry magazines. Word of mouth also plays a significant part

Student retention: The selection criteria are quite stringent and only students who are really motivated to work in the industry will be accepted into the course. The very high rate of student retention is probably also down to the fact that student is taught on a one to one basis and is seen as part of a team. The student's performance is monitored through the daily production and the student can follow his own progress on a daily basis. The target of 70 % of the daily production of a qualified operator is a measurable and achievable target

Funding: The training course is primarily funded by the Dept. of Agriculture, Fishery and Food, Forest Service. However, the employers typically will pay an hourly rate to the employee who in turn also will have certain costs in relation to transport etc.

Why this is an example of Good Practice

Course provider's view: The course is easy to manage as each student is part of an already established team. Course delivery can be easily adjusted to suit individual students needs. It is relatively easy to monitor student progress.

Participant's view: From the participant's point of view this course is very attractive because it is short-term, very focused but still covers a broad spectrum of relevant topics. The student ends up with a recognised NPTC certification after 6 weeks training. Due to the one-to-one training (two-to-one in classroom) the course is very student centred and can be tailored to meet the needs of the individual student's strengths and weaknesses.

Industry's view: It is almost prohibitively expensive to train employees in-house because of the price of the equipment (€360.000). This type of equipment cannot be manned by an inexperienced operator for long before it will cost the employer a lot in lost production.

Course Evaluation: There is a formal course evaluation in place involving each student. The NPTC also monitors the course as it is an independent awarding body.

Quality Assurance Coillte "Certificates of Competence" are issued to successful candidates on completion of the course. National Proficiency Test Council (NPTC) Certificates can be obtained through Coillte. To receive an NPTC Certificate a separate assessment is required. Coillte is recognised as a training body by both FAS and the Department of Education.