

2014

**Credit Concept for the
European profile “Collision Repair
Process Management” (CRPM)**



Product No 8

Imprint:

This publication is made by the USM project consortium.

Contact:

Prof. Dr. G. Spöttl, Dr. K. Ruth

Institut Technik und Bildung

Universität Bremen

Am Fallturm 1

28359 Bremen

Germany

You can find more information on the project website:

www.usm.uni-bremen.de

Bremen, Germany 2014



This project has been funded with support from the European Commission.

This publication reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

Photo Cover: Training Workshop at ITB
Source: ITB, Bremen

List of contents

1. Introduction..... 1

2. Credit concept and related terms..... 1

3. Key features 2

4. Credit Allocation 3

Credit Concept for the Collision Repair Process Management (CRPM) Profile

1. Introduction

The allocation of credits to single courses of the CRPM profile is executed as part of designing the curriculum. This paper explains the credit concept which is proposed to organize the learning programmes comprising the continuing vocational training programme. It also provides guidelines for the allocation of credit points to single courses.

2. Credit concept and related terms

Educational credit is used as a measure of learning. All systems of credits have to tackle two fundamental aspects of measurement: how to calibrate the volume of learning that has been achieved through the successful completion of a course, and how to attribute a level – better quality issue – to that learning.

Hence, this concept can be seen as a tool that helps to design, describe, and deliver programmes and award educational qualifications. The use of this concept, in conjunction with competence-based outcomes, makes learning programmes more transparent and facilitates the recognition of qualifications. Following the adoption of this concept each key area of the qualification (i.e. key area of courses) must be assessed and validated. This is essential to establish the extent to which a learner has in fact attained the particular coherent set of competences that each course attempts to convey.

The credit concept is expressed in a numerical representation of the relative weight of each course, and its accumulation towards a qualification. The credits have no value independent of the acquired competence-based outcomes to which they refer, and they reflect the achievement and accumulation of courses. Credit points provide information in terms of the overall weight of the outcomes required to achieve a qualification and allow the relative weight of each of its components to be identified.

For vocational learning programmes based on the standards we suggest the adoption of the European Credit System for Vocational Education and Training (ECVET) of around 1.800 hours work load for training and education per year. According to this system, credits are based on the workload which indicates the time trainees typi-

cally need to complete all learning activities in order to achieve expected outcomes. A convention is used according to which 60 points are allocated to the learning outcomes expected to be achieved in a year of formal full-time VET. This system is considered as a learner-centred system because it uses the concept of outcomes and learners' workload in curriculum design and delivery. This helps to place the learner at the centre of the educational process. Furthermore, by allocating credits to the key areas of a qualification, the creation of flexible learning pathways is facilitated

This system can be applied to different types of vocational programmes, whatever their mode of delivery (institution-based or work-based), the learner's status (full-time, part-time) and to all kinds of learning (formal, non-formal, informal).

3. Key features

The proposed credit concept has the following key features:

- Credits are allocated to the entire learning programmes as well as to the key areas of the courses. The number of credits allocated to each course is based on its weight in terms of the workload trainees need in order to achieve the expected outcomes in a formal context.
- Prior to calculating the workload associated with a programme or its components, the competence-based outcomes should be defined. These outcomes have to be context-based. The basis for choosing suitable learning activities and for a consistent calculation of the workload, which has to be achieved depends on the proficiency-level of the target group and the level of quality of the requirements.
- Credits are awarded to individual trainees (full-time or part-time) after completion of the learning activities required by a formal programme of learning or by participation in a specific course and the assessment of the outcomes which have been achieved.
- Credits awarded in one programme may be transferred into another programme, offered by the same or another institution if the context and the quality is comparable. This transfer can only take place if the degree-awarding institution recognizes the credits and the associated learning outcomes.
- The relative weight of each course, with regard to the qualification, should be established according to the workload hours needed to acquire the competences.

However, the calculation of workload must not be based on the number of contact hours only (i.e. hours spent by trainees on activities guided or assigned by teaching staff), since they are only one element of trainees' workload. It embraces all the learning activities required to achieve the expected outcomes, including the time spent on independent work, compulsory work placements, preparation for assessment and the time necessary for assessment.

Hence, the workload should result from the sum of the following components:

- The contact hours for the particular course (number of contact hours per week x number of weeks);
- The time spent in individual or group work required to complete the course successfully (i.e. preparation beforehand and finalizing of notes after attendance at a lecture, seminar or laboratory work; collection and selection of relevant material; required revision, study of that material; writing of papers/projects/; practical work, etc.)
- The time required to prepare for and undergo the assessment procedures (e.g. exams).
- The calculation of this time will follow the complexity, scope and volume of the expected outcomes in each course as well as the effort necessary for a learner to acquire the knowledge, skills and competence required for the course.
- The successful achievement of a qualification or of a course triggers the award of the associated credit points.

4. Credit Allocation

The rules for the allocation of credit points are at the core of any credit system. The rules which have been adopted here are as follows:

- The allocation of points has two phases: credit points are allocated first to a qualification as a whole and then to its key areas (single courses). For a given qualification, one formal learning context is taken as a reference and, on the basis of the orientation the total number of points is assigned for that qualification. From this

total, credit points are then allocated to each course according to their relative weight within the qualification.

- Using the ECVET as a reference: 60 credits are attached to the workload of a full-time year of formal learning (academic year), and the associated learning outcomes. One credit corresponds to 30 hours of work, so the student workload for an academic year will be 1600 to 1800 hours. The table below shows the proposed distribution:

1 Year program	60 Credit Points	1.800 hours
2 Year program	2x60 = 120 CP	3.600 hours
½ Year program	1/2x60 = 30 CP	900 hours
1 Credit = 30 Workload Hours (WH)		
10 credits	10x30 = 300 WH	
30 credits	30x30 = 900 WH	
60 credits	60x30 = 1800 WH	
Each study program covers 60 CP with 1800 WH per year		
1/2 Year program	30 CP = 900 WH	
¼ Year program	15 CP = 450 WH	

- Taking the learning programme for CRPM as an example, and based on the judgment of experts in this particular Continuing Vocational Training (CVT), the following distribution is suggested:

CVT	Collision Repair Process Manager (CRPM)	Code	Xxx
Credit Hrs	45	Workload Hrs	1350

NO.	Occupational Courses	Contact hours	Independent learning hours
Course 01	CWP of Reception of the Accident Vehicle through CRPM	15 h	15 h
Course 02	CWP of Handling the claim with the insurance company and categorizing the type of damage	20 h	20 h

Course 03	CWP of Carrying out a systematic damage diagnosis and application of (electronic) damage calculation	60 h	60 h
Course 04	CWP of Documentation of the damage calculation with the help of digital photographs and the like	20 h	20 h
Course 05	CWP of Sending the calculation and related digital data to the insurance company and handling feedback from the insurance company	15 h	15 h
Course 06	CWP of Detailed planning of the repair process in the repair shop	30 h	30 h
Course 07	CWP of quality control during the repair process	45 h	45 h
Course 08	CWP of returning the vehicle to the client and invoicing the insurance company	20 h	20 h
	Sum 1 (Course 01– 08): 450	□ 225	□ 225
Course 09	CWP of Workshop Employee Planning (lean workshop)	90 h	80 h
Course 10	CWP of Workshop Profit and Business Plan	120 h	60 h
Course 11	CWP of Planning Workshop Sizing / Financing	140 h	100 h
Course 12	CWP of Staff Development	130 h	60 h
Course 13	CWP of Marketing of Accident Damage Repair Services	60 h	60 h
	Sum 2 (Course 09–13): 900		360
Sum 1 + Sum 2		450 + 900 = 1350	
Credits Total		45 CP	