Group Award Specification for:

PDA in Rehabilitation Technologies at SCQF level 7

Group Award Code: GL58 47

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Contents

1 Introduction

This document was previously known as the Arrangements document. The purpose of this document is to:

- Assist centres to implement, deliver and manage the qualification
- Provide a guide for new staff involved in offering the qualification
- Inform course managers teaching staff, assessors, learners, employers and HEIs of the aims and purpose of the qualification
- Provide details of the range of learners the qualification is suitable for and progression opportunities

This validation proposal is for the new Group Award:

Professional Development Award (PDA) in Rehabilitation Technologies at SCQF level 7

This new award is specifically designed to provide a robust and certified award that equips individuals with a range of knowledge, specialist skills and values to enable them to improve professional practice, and provide continuous professional development.

This qualification has been written to provide a national qualification for technical staff working within the fields of Orthotics, Prosthetics and Orthopaedic Footwear manufacture.

Within the UK Orthotics, Prosthetics and Orthopaedic Footwear is provided by the NHS. The service is staffed by either NHS in-house staff or staff working for specified Contractor Companies who have a contract to provide this service to an NHS area. There are two groups of staff roles within Orthotics and Prosthetics: Orthotists and Prosthetists, are clinical staff who are graduate trained, and whose role is to assess patients, measure for devices and fit the devices to the patients. There are also technical staff whose role is to manufacture the prescribed devices. The technical staff will work under the following job titles: Orthotic Technician, Prosthetic Technician and Orthopaedic Footwear Technician. These technical staff may work at a manufacturing facility located in the hospital where the service is provided, they may work at a manufacturing facility away from the hospital site or they may work at a Central Fabrication site covering more than one hospital facility.

Until now there has been no nationally recognised training program for these technical staff and only training provided has been by individual employers for their own staff.

Healthcare provision in the early part of the 21st Century in Scotland continues to evolve to meet the demands of the population, to maintain and improve high quality, safe, effective and patient centred care (The Health Quality Strategy for NHS Scotland — Scottish Government 2010). Scottish Government Policy has highlighted the need for a workforce that will be able to meet the present and future healthcare needs through robust training and educational programme delivery (A Force for Improvement: Scottish Government 2009, A Guide to Education and Role Development for Health Care Support Worker 2010). In response to the challenges identified within workforce planning by a local NHS Board, early strategic discussions identified the potential for new and innovative training and educational provision to meet both the national policy drivers and local workforce plans NHS Scotland Career Framework (2009) Scottish Government; A Guide to Education and Role Development for Health Care Support Worker (2010); Everyone Matters: 2020 Workforce Vision Scottish Government (2013). This programme is therefore in response to workforce needs and strategic plans.

In addition the involvement of the British Association of Prosthetists and Orthotists (BAPO) British Healthcare Trades Association (BHTA) and NHS Education for Scotland (NES) has brought about a commitment to developing this role and resulted in the development of the PDA.

A Qualification Design Team (QDT) was formed with relevant stakeholders participating in the development of the award. The QDT comprised of stakeholders from industry, further and higher education as well SQA officers.

The core group of stakeholders was available throughout the design process to advise on the structure of the qualification and the content of the award as well as to ensure standardisation of approach and development in keeping with SQA standards and criteria.

The specialist Units were written by professionals who are working in their respective fields thereby ensuring that the content of the Units is relevant and fit for purpose for the professions and for the scope of the work and roles undertaken by the support workers.

The Professional Development Award in Rehabilitation Technologies will be suitable for those who:

- have sufficient experience as a Technician in an Orthotic, Prosthetic or Orthopaedic Footwear manufacturing facility.

There is no nationally recognised qualification in this field in the UK and it is anticipated that the PDA will meet the needs of the profession and be the appropriate qualification for Health Boards and Contractor Companies. It has been designed to strengthen and support the workforce through knowledge, skills and tools that offer a consistent approach, safe practice and the promotion of health and wellbeing.

This qualification will be recognised by employers, British Association of Prosthetists and Orthotists (BAPO) and British Healthcare Trades Association (BHTA) as best practice in the training and up-skilling of the current workforce of Technicians.

2 Qualification structure

This Group Award is made up of 7 SQA Unit credits. It comprises five mandatory Units with 40 SCQF credit points at SCQF level 7. Candidates then choose 2 Unit credits at SCQF level 7 from a list of 16 Units for a further 16 SCQF credit points at SCQF level 7 giving a total of 56 SCQF credit points, this choice will be based on their field of manufacture within Orthotics, Prosthetics and Orthopedic Footwear Manufacture. A mapping of Core Skills development opportunities is available in Section 5.3.

2.1 Structure

The qualification is a Group Award — Professional Development Award (PDA) in Rehabilitation Technologies and comprises of the following Units at SCQF level 7.

The following two tables will show how the award is designed. The first table lists the Mandatory Units indicating the SQA credit value, SCQF level and credit points.

The second table lists the optional Units to be chosen by the candidate making up the 7 Unit credit PDA.

Table 1

Mandatory

4 code	2 code	Unit title	SCQF level	SCQF credit points	SQA credit
HE2K	34	Anatomy and Physiology for Orthotics and Prosthetics	7	8	1
HE2J	34	Biomechanics for Orthotics and Prosthetics	7	8	1
DT5Y	34	Metal Component Manufacture	7	8	1
DT61	34	Plastic Component Manufacture	7	8	1
DR2D	34	Safety Engineering and the Environment	7	8	1

Optional

HE2L	34	Orthotics: Foot Orthotics	7	8	1
HE2M	34	Orthotics: Ankle Foot Orthotics	7	8	1
HE2N	34	Orthotics: Knee Ankle Foot Orthotics	7	16	2
HE2P	34	Orthotics: Upper Limb and Spinal Orthotics	7	8	1
HE2R	34	Prosthetics Upper Limb: Trans-radial Prosthesis	7	8	1
HE2T	34	Prosthetics Upper Limb: Trans-humeral Prosthesis	7	8	1
HE2V	34	Prosthetics Upper Limb: Shoulder Disarticulation Prosthesis	7	8	1
HE2W	34	Prosthetics Upper Limb: Trans-radial Prosthesis with Electric Control Systems	7	8	1
HE2X	34	Prosthetics Lower Limb: Trans-tibial Prosthesis	7	8	1
HE2Y	34	Prosthetics Lower Limb: Trans-femoral Prosthesis	7	8	1
HE30	34	Prosthetics Lower Limb: Hip Disarticulation Prosthesis	7	8	1
HE31	34	Prosthetics Lower Limb: Ankle and Knee Disarticulation	7	8	1
HE32	34	Orthotics Footwear Manufacture 1: Measuring the Foot and Last Manufacture	7	8	1

Optional (cont)

4 code	2 code	Unit title	SCQF level	SCQF credit points	SQA credit
HE33	34	Orthotics Footwear Manufacture 2: Pattern Cutting and Closing	7	8	1
HE34	34	Orthotics Footwear Manufacture 3: Over Lasting and Finishing	7	8	1
HE35	34	Orthotics Footwear Manufacture 4: Adaptations	7	8	1

The award is achieved on the successful attainment of all five mandatory Units plus a total of 2 SQA Unit credits from the optional Units contained within the Group Award.

The qualification is at SCQF level 7. This reflects the level of knowledge required to develop and improve practice. There is currently no SQA qualification available to fulfil this need.

3 Aims of the qualification

The award will give current and future technicians the knowledge and skills to improve their current practice. The award will provide a qualification that has not been available previously and that has been requested by the profession and workforce planners.

3.1 General aims of the qualification

The overall aim of this award is twofold; to equip current and future support workers who are to enhance their practice through learning, to further develop their skills by equipping them with the necessary tools to offer a consistent and reliable service to clients.

The qualification has the following general aims:

1 Provide academic stimulus and challenge.

2 Develop study skills.

3 To provide knowledge and personal effectiveness.

4 To develop transferrable skills including the following Core Skills of *Communication, Problem Solving, Working with Others* and *Information and Communication Technology (ICT)*.

5 To develop negotiation and enhanced communication skills.

6 Develop employments skills and provide opportunities for career planning and enhancing candidates employment prospects.

7 Enable progression within the Scottish Credit and Qualifications Framework and into further or higher education.

3.2 Specific aims of the qualification

1 Develop and apply a broad range of specialised vocational knowledge and skills and gain recognition from British Association of Prosthetits and Orthotists (BAPO) and British Health Care Trades Association (BHTA)

2 Develop/build on co-operative working skills.

3 Develop underpinning knowledge that enables integration of theory and practice.

4 Develop inter-professional working practices.

5 Demonstrate effective development skills of orthotic and prosthetic device and or

6 Demonstrate effective development skills of orthopaedic footwear and or

7 Demonstrate competencies in the manufacture of orthotic and prosthetic devices and or

8 Develop competencies in the manufacture of orthopaedic footwear.

3.3 Graded Unit

There is no Graded Unit for this qualification.

4 Recommended entry to the qualification

Entry to this qualification is at the discretion of the centre. The following information on prior knowledge, skills, experience or qualifications that provide suitable preparation for this qualification has been provided by the Qualification Design Team as guidance only.

In order to be able to undertake the practical aspects and assessments of this course it is preferred that candidates are employed as a technicians working in the field of Orthotics, Prosthetics or Orthopaedic Footwear Manufacture.

It is recommended that candidates wishing to undertake the award are able to demonstrate effective written and oral communication skills and as the course utilizes e-learning approaches candidates need to have basic IT skills and an ability to use the internet.

4.1 Core Skills entry profile

The Core Skill entry profile provides a summary of the associated assessment activities that exemplify why a particular level has been recommended for this qualification. The information should be used to identify if additional learning support needs to be put in place for learners whose Core Skills profile is below the recommended entry level or whether learners should be encouraged to do an alternative level or learning programme.

Core Skill	Recommended SCQF entry profile	Associated assessment activities
Communication	6	Good communication skills are required for learners undertaking this qualification. Learners will be required to read, understand and evaluate a range of documentation and participate in class discussions. Learners will be required to produce written assignments.
Numeracy	6	Learners will be required to have basic numeracy skills as measuring device will be used and also mathematics skills will be required during manufacturing techniques.
Information and Communication Technology (ICT)	6	Learners will be required to research using the internet, books and papers. . Learners will be required to submit assignments. Learners are required to use IT proficiently.
Problem Solving	6	Problem solving skills. Reflective evaluations of how the learner applies theory to practice.
Working with Others	6	Participation in group exercises. Interaction with training providers, clients and colleagues. This skill will be further developed through current employment or placement.

5 Additional benefits of the qualification in meeting employer needs

This qualification was designed to meet a specific purpose and what follows are details on how that purpose has been met through mapping of the Units to the aims of the qualification. Through meeting the aims, additional value has been achieved by linking the Unit standards with those defined in National Occupational Standards and/or trade/professional body requirements. In addition, significant opportunities exist for learners to develop the more generic skill, known as Core Skills through doing this qualification.

5.1 Mapping of qualification aims to Units

Code	Unit title	General Aims									
		1	2	3	4	5	6	7	8	9	10
HE2K 34	Anatomy and Physiology for Orthotics and Prosthetics	X	X	X	X	X	X	X			
HE2J 34	Biomechanics for Orthotics and Prosthetics	X	X	X	X	X	X	X			
DT5Y 34	Metal Component Manufacture	X	X	X	X	X	X	X			
DT61 34	Plastic Component Manufacture	X	X	X	X	X	X	X			
DR2D 34	Safety Engineering and the Environment	X	X	X	X	X	X	X			
HE2L 34	Orthotics: Foot Orthotics	X	X	X	X	X	X	X			
HE2M 34	Orthotics: Ankle Foot Orthotics	X	X	X	X	X	X	X			
HE2N 34	Orthotics: Knee Ankle Foot Orthotics	X	X	X	X	X	X	X			
HE2P 34	Orthotics: Upper Limb and Spinal Orthotics	X	X	X	X	X	X	X			
HE2R 34	Prosthetics Upper Limb: Trans-radial Prosthesis	X	X	X	X	X	X	X			
HE2T 34	Prosthetics Upper Limb: Trans-humeral Prosthesis	X	X	X	X	X	X	X			
HE2V 34	Prosthetics Upper Limb: Shoulder Disarticulation Prosthesis	X	X	X	X	X	X	X			
HE2W 34	Prosthetics Upper Limb: Trans-radial Prosthesis with Electric Control Systems	X	X	X	X	X	X	X			
HE2X 34	Prosthetics Lower Limb: Trans-tibial Prosthesis	X	X	X	X	X	X	X			

Code	Unit title	General Aims									
		1	2	3	4	5	6	7	8	9	10
HE2Y 34	Prosthetics Lower Limb: Trans-femoral Prosthesis	X	X	X	X	X	X	X			
HE30 34	Prosthetics Lower Limb: Hip Disarticulation Prosthesis	X	X	X	X	X	X	X			
HE31 34	Prosthetics Lower Limb: Ankle and Knee Disarticulation	X	X	X	X	X	X	X			
HE32 34	Orthotics Footwear Manufacture 1: Measuring the Foot and Last Manufacture	X	X	X	X	X	X	X			
HE33 34	Orthotics Footwear Manufacture 2: Pattern Cutting and Closing	X	X	X	X	X	X	X			
HE34 34	Orthotics Footwear Manufacture 3: Over Lasting and Finishing	X	X	X	X	X	X	X			
HE35 34	Orthotics Footwear Manufacture 4: Adaptations	X	X	X	X	X	X	X			

Code	Unit title	Specialised Aims									
		1	2	3	4	5	6	7	8	9	10
HE2K 34	Anatomy and Physiology for Orthotics and Prosthetics	X	X	X	X	X	X	X	X		
HE2J 34	Biomechanics for Orthotics and Prosthetics	X	X	X	X	X	X	X	X		
DT5Y 34	Metal Component Manufacture	X	X	X	X	X	X	X	X		
DT61 34	Plastic Component Manufacture	X	X	X	X	X	X	X	X		
DR2D 34	Safety Engineering and the Environment	X	X	X	X	X	X	X	X		
HE2L 34	Orthotics: Foot Orthotics	X	X	X	X	X	X	X	X		
HE2M 34	Orthotics: Ankle Foot Orthotics	X	X	X	X	X		X			
HE2N 34	Orthotics: Knee Ankle Foot Orthotics	X	X	X	X	X		X			
HE2P 34	Orthotics: Upper Limb and Spinal Orthotics	X	X	X	X	X		X			
HE2R 34	Prosthetics Upper Limb: Trans-radial Prosthesis	X	X	X	X	X		X			
HE2T 34	Prosthetics Upper Limb: Trans-humeral Prosthesis	X	X	X	X	X		X			
HE2V 34	Prosthetics Upper Limb: Shoulder Disarticulation Prosthesis	X	X	X	X	X		X			
HE2Y 34	Prosthetics Lower Limb: Trans-femoral Prosthesis	X	X	X	X	X		X			
HE30 34	Prosthetics Lower Limb: Hip Disarticulation Prosthesis	X	X	X	X	X		X			
HE31 34	Prosthetics Lower Limb: Ankle and Knee Disarticulation	X	X	X	X	X		X			

Code	Unit title	Specialised Aims									
		1	2	3	4	5	6	7	8	9	10
HE32 34	Orthotics Footwear Manufacture 1:Measing the Foot and Last Manufacture	X	X	X	X	X		X			
HE33 34	Orthotics Footwear Manufacture 2: Pattern Cutting and Closing	X	X	X	X	X		X			
HE34 34	Orthotics Footwear Manufacture 3: Over Lasting and Finishing	X	X	X	X	X		X			
HE35 34	Orthotics Footwear Manufacture 4: Adaptations	X	X	X	X		X		X		

5.2 Mapping of National Occupational Standards (NOS) and/or trade body standards

The following two tables show how the NOS's relate to this qualification the first table shows the NOS for Rehabilitation Technicians and the second table shows which Units each NOS covers.

RT1	Prepare and maintain environments, materials and equipment for the routine design and manufacture of custom made devices
RT2	Produce duplicate models
RT5	Prepare routine components for custom made devices
RT6	Design and manufacture routine custom made devices to fitting stage to meet the prescription
RT7	Carry out routine finishing of custom made devices
RT8	Provide technical assistance with the fitting of custom made devices
RT9	Carry out routine modifications to custom made devices
RT10	Carry out routine repairs to custom made devices
RT11	Advise on the suitability of existing, new and emerging technology and materials for routine custom made devices
RT12	Prepare and maintain environments, materials and equipment for the non-routine design and manufacture of custom made devices
RT15	Prepare non-routine components for custom made devices
RT16	Design and manufacture non-routine custom made devices to fitting stage to meet the prescription
RT17	Carry out non-routine finishing of custom made devices
RT18	Carry out non-routine modifications to custom made devices
RT19	Carry out non-routine repairs to custom made devices
RT20	Provide technical assistance with the fitting of non-routine custom made devices
RT21	Advise on the suitability of existing, new and emerging technology and materials for non-routine custom made devices
RT22	Determine the suitability of new and emerging technology and materials for custom made devices
RT23	Produce positive casts prior to rectification
RT24	Carry out rectification of casts to meet the prescription

Code	Unit title	National Occupational Standard																			
		RT1	RT2	RT5	RT6	RT7	RT8	RT9	RT10	RT11	RT12	RT15	RT16	RT17	RT18	RT19	RT20	RT21	RT22	RT23	RT24
HE2K 34	Anatomy and Physiology for Orthotics and Prosthetics																				
HE2J 34	Biomechanics for Orthotics and Prosthetics																				
DT5Y 34	Metal Component Manufacture																				
DT61 34	Plastic Component Manufacture																				
DR2D 34	Safety Engineering and the Environment	X									X										
HE2L 34	Orthotics: Foot Orthotics	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
HE2M 34	Orthotics: Ankle Foot Orthotics	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
HE2N 34	Orthotics: Knee Ankle Foot Orthotics	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
HE2P 34	Orthotics: Upper Limb and Spinal Orthotics	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
HE2R 34	Prosthetics Upper Limb: Trans-radial Prosthesis	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Code	Unit title	National Occupational Standard																			
		RT1	RT2	RT5	RT6	RT7	RT8	RT9	RT10	RT11	RT12	RT15	RT16	RT17	RT18	RT19	RT20	RT21	RT22	RT23	RT24
HE2T 34	Prosthetics Upper Limb: Trans-humeral Prosthesis	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
HE2V 34	Prosthetics Upper Limb: Shoulder Disarticulation Prosthesis	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
HE2W 34	Prosthetics Upper Limb: Trans-radial Prosthesis with Electric Control Systems	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
HE2X 34	Prosthetics Lower Limb: Trans-tibial Prosthesis	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
HE2Y 34	Prosthetics Lower Limb: Trans-femoral Prosthesis	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
HE30 34	Prosthetics Lower Limb: Hip Disarticulation Prosthesis	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
HE31 34	Prosthetics Lower Limb: Ankle and Knee Disarticulation	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		

Code	Unit title	National Occupational Standard																			
		RT1	RT2	RT5	RT6	RT7	RT8	RT9	RT10	RT11	RT12	RT15	RT16	RT17	RT18	RT19	RT20	RT21	RT22	RT23	RT24
HE32 34	Orthotics Footwear Manufacture 1: Measuring the Foot and Last Manufacture	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
HE33 34	Orthotics Footwear Manufacture 2: Pattern Cutting and Closing	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
HE34 34	Orthotics Footwear Manufacture 3: Over Lasting and Finishing	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
HE35 34	Orthotics Footwear Manufacture 4: Adaptations	X	X	X			X			X	X	X					X	X	X	X	X

5.3 Mapping of Core Skills development opportunities across the qualification

Unit code	Unit title	Communication		Numeracy		ICT		Problem Solving			Working with Others	
		Written	Oral	Using Number	Using Graphical Information	Accessing Information	Providing/Creating Information	Critical Thinking	Planning and Organising	Reviewing and Evaluating	Working Co-operatively with Others	Reviewing Co-operative Contribution
HE2K 34	Anatomy and Physiology for Orthotics and Prosthetics	Written communication through assignments and written assessments.	Oral communication through class and group discussions and presentations.			Information accessed through the internet researching information.	This could be developed through the production of written assignments and assessments.	This could be developed through group and class discussions. Reflection on theory to practice	Could be developed through completion and submission of work assignment. Adhering to submission dates. Monitoring time management throughout the delivery of the Unit.	Could be developed through reflective evaluations from knowledge to practice.	Could be developed through working within different teams, ie class groups, work and placement teams.	Could be developed by workplace relationships.
HE2J 34	Biomechanics for Orthotics and Prosthetics	Written communication through assignments and written assessments.	Oral communication through class and group discussions and presentations.	This could be developed when working on force equations and force diagrams.	This could be developed when working on force equations and force diagrams.	Information accessed through the internet researching information.	This could be developed through the production of written assignments and assessments.	This could be developed through group and class discussions. Reflection on theory to practice.	Could be developed through completion and submission of work assignment. Adhering to submission dates. Monitoring time management throughout the delivery of the Unit.	Could be developed through reflective evaluations from knowledge to practice.	Could be developed through working within different teams, ie class groups, work and placement teams.	Could be developed by workplace relationships.
DT5Y 34	Metal Component Manufacture	Written communication through assignments and written assessments.	Oral communication through class and group discussions and presentations.			Information accessed through the internet researching information.	This could be developed through the production of written assignments and assessments.	This could be developed through group and class discussions. Reflection on theory to practice.	Could be developed through completion and submission of work assignment. Adhering to submission dates. Monitoring time management throughout the delivery of the Unit.	Could be developed through reflective evaluations from knowledge to practice.	Could be developed through working within different teams, ie class groups, work and placement teams.	Could be developed by workplace relationships.

Unit code	Unit title	Communication		Numeracy		ICT		Problem Solving			Working with Others	
		Written	Oral	Using Number	Using Graphical Information	Accessing Information	Providing/Creating Information	Critical Thinking	Planning and Organising	Reviewing and Evaluating	Working Co-operatively with Others	Reviewing Co-operative Contribution
DT6134	Plastic Component Manufacture	Written communication through assignments and written assessments.	Oral communication through class and group discussions and presentations.			Information accessed through the internet researching information.	This could be developed through the production of written assignments and assessments.	This could be developed through group and class discussions. Reflection on theory to practice.	Could be Could be developed through completion and submission of work assignment. Adhering to submission dates. Monitoring time management throughout the delivery of the Unit.	Could be developed through reflective evaluations from knowledge to practice.	Could be developed through working within different teams, ie class groups, work and placement teams.	Could be developed by workplace relationships.
DR2D34	Safety Engineering and the Environment	Written communication through assignments and written assessments.	Oral communication through class and group discussions and presentations.			Information accessed through the internet researching information.	This could be developed through the production of written assignments and assessments.	This could be developed through group and class discussions. Reflection on theory to practice.	Could be developed through completion and submission of work assignment. Adhering to submission dates. Monitoring time management throughout the delivery of the Unit.	Could be developed through reflective evaluations from knowledge to practice.	Could be developed through working within different teams, ie class groups, work and placement teams.	Could be developed by workplace relationships.
HE2L34	Orthotics Foot Orthotics	Written communication through assignments and written assessments.	Oral communication through class and group discussions and presentations.	This could be developed when using measuring devices during the manufacturing process	This could be developed when using measuring devices during the manufacturing process		.		Could be developed through completion and submission of work assignment. Adhering to submission dates. Monitoring time management throughout the delivery of the Unit.	Could be developed through reflective evaluations from knowledge to practice.	Could be developed through working within different teams, ie class groups, work and placement teams.	Could be developed by workplace relationships.

Unit code	Unit title	Communication		Numeracy		ICT		Problem Solving			Working with Others	
		Written	Oral	Using Number	Using Graphical Information	Accessing Information	Providing/Creating Information	Critical Thinking	Planning and Organising	Reviewing and Evaluating	Working Co-operatively with Others	Reviewing Co-operative Contribution
HE2M 34	Orthotics: Ankle Foot Orthotics	Written communication through assignments and written assessments.	Oral communication through class and group discussions and presentations.	This could be developed when using measuring devices during the manufacturing process	This could be developed when using measuring devices during the manufacturing process				Could be developed through completion and submission of work assignment. Adhering to submission dates. Monitoring time management throughout the delivery of the Unit.	Could be developed through reflective evaluations from knowledge to practice.	Could be developed through working within different teams, ie class groups, work and placement teams.	Could be developed by workplace relationships.
HE2N 34	Orthotics: Knee Ankle Foot Orthotics	Written communication through assignments and written assessments.	Oral communication through class and group discussions and presentations.	This could be developed when using measuring devices during the manufacturing process	This could be developed when using measuring devices during the manufacturing process		.		Could be developed through completion and submission of work assignment. Adhering to submission dates. Monitoring time management throughout the delivery of the Unit.	Could be developed through reflective evaluations from knowledge to practice.	Could be developed through working within different teams, ie class groups, work and placement teams.	Could be developed by workplace relationships.
HE2P 34	Orthotics: Upper Limb and Spinal Orthotics	Written communication through assignments and written assessments.	Oral communication through class and group discussions and presentations.	This could be developed when using measuring devices during the manufacturing process.	This could be developed when using measuring devices during the manufacturing process.				Could be developed through completion and submission of work assignment. Adhering to submission dates. Monitoring time management throughout the delivery of the Unit.	Could be developed through reflective evaluations from knowledge to practice.	Could be developed through working within different teams, ie class groups, work and placement teams.	Could be developed by workplace relationships.

Unit code	Unit title	Communication		Numeracy		ICT		Problem Solving			Working with Others	
		Written	Oral	Using Number	Using Graphical Information	Accessing Information	Providing/Creating Information	Critical Thinking	Planning and Organising	Reviewing and Evaluating	Working Co-operatively with Others	Reviewing Co-operative Contribution
HE2R 34	Prosthetics Upper Limb: Trans-radial Prosthesis	Written communication through assignments and written assessments.	Oral communication through class and group discussions and presentations.	This could be developed when using measuring devices during the manufacturing process.	This could be developed when using measuring devices during the manufacturing process.				Could be developed through completion and submission of work assignment. Adhering to submission dates. Monitoring time management throughout the delivery of the Unit.	Could be developed through reflective evaluations from knowledge to practice.	Could be developed through working within different teams, ie class groups, work and placement teams.	Could be developed by workplace relationships.
HE2T 34	Prosthetics Upper Limb: Trans-humeral Prosthesis	Written communication through assignments and written assessments.	Oral communication through class and group discussions and presentations.	This could be developed when using measuring devices during the manufacturing process.	This could be developed when using measuring devices during the manufacturing process.				Could be developed through completion and submission of work assignment. Adhering to submission dates. Monitoring time management throughout the delivery of the Unit.	Could be developed through reflective evaluations from knowledge to practice.	Could be developed through working within different teams, ie class groups, work and placement teams.	Could be developed by workplace relationships.
HE2V 34	Prosthetics Upper Limb: Shoulder Disarticulation Prosthesis	Written communication through assignments and written assessments.	Oral communication through class and group discussions and presentations.	This could be developed when using measuring devices during the manufacturing process.	This could be developed when using measuring devices during the manufacturing process.				Could be developed through completion and submission of work assignment. Adhering to submission dates. Monitoring time management throughout the delivery of the Unit.	Could be developed through reflective evaluations from knowledge to practice.	Could be developed through working within different teams, ie class groups, work and placement teams.	Could be developed by workplace relationships.

Unit code	Unit title	Communication		Numeracy		ICT		Problem Solving			Working with Others	
		Written	Oral	Using Number	Using Graphical Information	Accessing Information	Providing/Creating Information	Critical Thinking	Planning and Organising	Reviewing and Evaluating	Working Co-operatively with Others	Reviewing Co-operative Contribution
HE2W 34	Prosthetics Upper Limb: Trans-radial Prosthesis with Electric Control Systems	Written communication through assignments and written assessments.	Oral communication through class and group discussions and presentations.	This could be developed when using measuring devices during the manufacturing process.	This could be developed when using measuring devices during the manufacturing process.				Could be developed through completion and submission of work assignment. Adhering to submission dates. Monitoring time management throughout the delivery of the Unit.	Could be developed through reflective evaluations from knowledge to practice.	Could be developed through working within different teams, ie class groups, work and placement teams.	Could be developed by workplace relationships.
HE2X 34	Prosthetics Lower Limb: Trans-tibial Prosthesis	Written communication through assignments and written assessments.	Oral communication through class and group discussions and presentations.	This could be developed when using measuring devices during the manufacturing process.	This could be developed when using measuring devices during the manufacturing process.				Could be developed through completion and submission of work assignment. Adhering to submission dates. Monitoring time management throughout the delivery of the Unit.	Could be developed through reflective evaluations from knowledge to practice.	Could be developed through working within different teams, ie class groups, work and placement teams.	Could be developed by workplace relationships.
HE2Y 34	Prosthetics Lower Limb: Trans-femoral Prosthesis	Written communication through assignments and written assessments.	Oral communication through class and group discussions and presentations.	This could be developed when using measuring devices during the manufacturing process.	This could be developed when using measuring devices during the manufacturing process.				Could be developed through completion and submission of work assignment. Adhering to submission dates. Monitoring time management throughout the delivery of the Unit.	Could be developed through reflective evaluations from knowledge to practice.	Could be developed through working within different teams, ie class groups, work and placement teams.	Could be developed by workplace relationships.

Unit code	Unit title	Communication		Numeracy		ICT		Problem Solving			Working with Others	
		Written	Oral	Using Number	Using Graphical Information	Accessing Information	Providing/Creating Information	Critical Thinking	Planning and Organising	Reviewing and Evaluating	Working Co-operatively with Others	Reviewing Co-operative Contribution
HE3034	Prosthetics Lower Limb: Hip Disarticulation Prosthesis	Written communication through assignments and written assessments.	Oral communication through class and group discussions and presentations.	This could be developed when using measuring devices during the manufacturing process.	This could be developed when using measuring devices during the manufacturing process.				Could be developed through completion and submission of work assignment. Adhering to submission dates. Monitoring time management throughout the delivery of the Unit.	Could be developed through reflective evaluations from knowledge to practice.	Could be developed through working within different teams, ie class groups, work and placement teams.	Could be developed by workplace relationships.
HE3134	Prosthetics Lower Limb: Ankle and Knee Disarticulation	Written communication through assignments and written assessments.	Oral communication through class and group discussions and presentations.	This could be developed when using measuring devices during the manufacturing process.	This could be developed when using measuring devices during the manufacturing process.				Could be developed through completion and submission of work assignment. Adhering to submission dates. Monitoring time management throughout the delivery of the Unit.	Could be developed through reflective evaluations from knowledge to practice.	Could be developed through working within different teams, ie class groups, work and placement teams.	Could be developed by workplace relationships.
HE3234	Orthotics Footwear Manufacture 1: Measuring the Foot and Last Manufacture	Written communication through assignments and written assessments.	Oral communication through class and group discussions and presentations.	This could be developed when using measuring devices during the manufacturing process.	This could be developed when using measuring devices during the manufacturing process.		.		Could be developed through completion and submission of work assignment. Adhering to submission dates. Monitoring time management throughout the delivery of the Unit.	Could be developed through reflective evaluations from knowledge to practice.	Could be developed through working within different teams, ie class groups, work and placement teams.	Could be developed by workplace relationships.

Unit code	Unit title	Communication		Numeracy		ICT		Problem Solving			Working with Others	
		Written	Oral	Using Number	Using Graphical Information	Accessing Information	Providing/Creating Information	Critical Thinking	Planning and Organising	Reviewing and Evaluating	Working Co-operatively with Others	Reviewing Co-operative Contribution
HE3334	Orthotics Footwear Manufacture 2: Pattern Cutting and Closing	Written communication through assignments and written assessments.	Oral communication through class and group discussions and presentations.	This could be developed when using measuring devices during the manufacturing process.	This could be developed when using measuring devices during the manufacturing process.				Could be developed through completion and submission of work assignment. Adhering to submission dates. Monitoring time management throughout the delivery of the Unit.	Could be developed through reflective evaluations from knowledge to practice.	Could be developed through working within different teams, ie class groups, work and placement teams.	Could be developed by workplace relationships.
HE3434	Orthotics Footwear Manufacture 3: Over Lasting and Finishing	Written communication through assignments and written assessments.	Oral communication through class and group discussions and presentations.	This could be developed when using measuring devices during the manufacturing process.	This could be developed when using measuring devices during the manufacturing process.				Could be developed through completion and submission of work assignment. Adhering to submission dates. Monitoring time management throughout the delivery of the Unit.	Could be developed through reflective evaluations from knowledge to practice.	Could be developed through working within different teams, ie class groups, work and placement teams.	Could be developed by workplace relationships.
HE3534	Orthotics Footwear Manufacture 4: Adaptations	Written communication through assignments and written assessments.	Oral communication through class and group discussions and presentations.	This could be developed when using measuring devices during the manufacturing process.	This could be developed when using measuring devices during the manufacturing process.				Could be developed through completion and submission of work assignment. Adhering to submission dates. Monitoring time management throughout the delivery of the Unit.	Could be developed through reflective evaluations from knowledge to practice.	Could be developed through working within different teams, ie class groups, work and placement teams.	Could be developed by workplace relationships.

5.4 Assessment Strategy for the qualification

Unit	Assessment			
	Outcome 1	**Outcome 2**	**Outcome 3**	**Outcome 4**
Anatomy and Physiology for Orthotics and Prosthetics	Assessed through a research project.	Assessed through a research project.	Assessed through a practical demonstration which establishes the candidate's knowledge.	Assessed through a research project.
Biomechanics for Orthotics and Prosthetics	Assessed by a series of short question and answer using an online assessment in a closed-book scenario.	Assessed by a series of short question and answer using an online assessment in a closed-book scenario.	Assessed by a series of short question and answer using an online assessment in a closed-book scenario.	
Metal Component Manufacture	Assessed by a written report based on a study.	Assessed by a written report based on a study.	Assessed by means of an oral presentation.	
Plastic Component Manufacture	Assessed by a short written report.	Assessed by a short written report.	Assessed by means of a written test lasting no more than 30 minutes.	Assessed by a short written report.
Safety Engineering and the Environment	Assessed by a series of short question and answer using an online assessment in a closed-book scenario.	Assessed by a series of short question and answer using an online assessment in a closed-book scenario.	Assessed by a short written report.	Assessed by practical demonstration of the candidate carrying out a risk assessment.
Orthotics: Foot Orthotics	Assessed through a practical demonstration which establishes the candidate's knowledge.	Assessed through a practical demonstration which establishes the candidate's knowledge.	Assessed by practical demonstration of the candidate manufacturing devices.	

Unit	Assessment			
	Outcome 1	**Outcome 2**	**Outcome 3**	**Outcome 4**
Orthotics: Ankle Foot Orthotics	Assessed by practical demonstration of the candidate manufacturing devices.	Assessed by practical demonstration of the candidate manufacturing devices.	Assessed by practical demonstration of the candidate manufacturing devices.	
Orthotics: Knee Ankle Foot Orthotics	Assessed by practical demonstration of the candidate manufacturing devices.	Assessed by practical demonstration of the candidate manufacturing devices.	Assessed by practical demonstration of the candidate manufacturing devices.	Assessed by practical demonstration of the candidate manufacturing devices.
Orthotics: Upper Limb and Spinal Orthotics	Assessed by practical demonstration of the candidate manufacturing devices.	Assessed by practical demonstration of the candidate manufacturing devices.	Assessed by practical demonstration of the candidate manufacturing devices.	
Prosthetics Upper Limb: Trans-radial Prosthesis	Assessed by practical demonstration of the candidate manufacturing devices.	Assessed by practical demonstration of the candidate manufacturing devices.		
Prosthetics Upper Limb: Trans-humeral Prosthesis	Assessed by practical demonstration of the candidate manufacturing devices.	Assessed by practical demonstration of the candidate manufacturing devices.	Assessed by practical demonstration of the candidate manufacturing devices.	
Prosthesis Upper Limb: Shoulder Disarticulation Prosthesis	Assessed by practical demonstration of the candidate manufacturing devices.	Assessed by practical demonstration of the candidate manufacturing devices.	Assessed by practical demonstration of the candidate manufacturing devices.	

Unit	Assessment			
	Outcome 1	**Outcome 2**	**Outcome 3**	**Outcome 4**
Prosthetics Upper Limb: Trans-radial Prosthesis with Electric Control Systems	Assessed by practical demonstration of the candidate manufacturing devices.	Assessed by practical demonstration of the candidate manufacturing devices.		
Prosthetics Lower Limb: Trans-tibial Prosthesis	Assessed by practical demonstration of the candidate manufacturing devices.	Assessed by practical demonstration of the candidate manufacturing devices.	Assessed by practical demonstration of the candidate manufacturing devices.	
Prosthetics Lower Limb: Trans-femoral Prosthesis	Assessed by practical demonstration of the candidate manufacturing devices.	Assessed by practical demonstration of the candidate manufacturing devices.	Assessed by practical demonstration of the candidate manufacturing devices.	Assessed by practical demonstration of the candidate servicing devices.
Prosthetics Lower Limb: Hip Disarticulation Prosthesis	Assessed by practical demonstration of the candidate manufacturing devices.	Assessed by practical demonstration of the candidate manufacturing devices.	Assessed by practical demonstration of the candidate manufacturing devices.	
Prosthetics Lower Limb: Ankle and Knee Disarticulation	Assessed by practical demonstration of the candidate manufacturing devices.	Assessed by practical demonstration of the candidate manufacturing devices.	Assessed by practical demonstration of the candidate manufacturing devices.	
Orthotics Footwear Manufacture 1: Measuring the Foot and Last Manufacture	Assessed through a practical demonstration which establishes the candidate's knowledge.	Assessed by practical demonstration of the candidate manufacturing devices.	Assessed by practical demonstration of the candidate manufacturing devices.	

Unit	Assessment			
	Outcome 1	**Outcome 2**	**Outcome 3**	**Outcome 4**
Orthotics Footwear Manufacture 2: Pattern Cutting and Closing	Assessed through a practical demonstration which establishes the candidate's knowledge.	Assessed by practical demonstration of the candidate manufacturing devices.	Assessed by practical demonstration of the candidate manufacturing devices.	
Orthotics Footwear Manufacture 3: Over Lasting and Finishing	Assessed through a practical demonstration which establishes the candidate's knowledge.	Assessed by practical demonstration of the candidate manufacturing devices.	Assessed by practical demonstration of the candidate manufacturing devices.	
Orthotics Footwear Manufacture 4: Adaptations	Assessed through a practical demonstration which establishes the candidate's knowledge.	Assessed by practical demonstration of the candidate manufacturing devices.	Assessed by practical demonstration of the candidate manufacturing devices.	

6 Guidance on approaches to delivery and assessment

The qualification is a Professional Development Award in PDA in Rehabilitation Technologies. It is a Group Award comprising of five mandatory Units and two further optional Units from a selection of 16 Units at SCQF level 7 (56 credit points at SCQF level 7).

The award is designed to further develop the knowledge and understanding of those with sufficient experience currently working as technicians in Orthotics, Prosthetics or Orthopaedic Footwear Manufacture.

The Units teaching allocation is 40 notional hours per credit.

It is recommended that where specialist knowledge is required, appropriately qualified and experienced tutors deliver these Units.

6.1 Sequencing/integration of Units

It would be preferable for a candidate undertaking this qualification to complete the following Unit first as this will be the perfect introduction to a workshop environment before undertaking the workplace assessed Units.

DR2D 34 *Safety Engineering and the Environment*

Candidates will be assessed on all of the Outcomes though a variety of assessment methods including assignments, research tasks and case studies and practical assessments.

6.2 Recognition of Prior Learning

SQA recognises that learners gain knowledge and skills acquired through formal, non-formal and informal learning contexts.

The recognition of prior learning may **not** be used as a method of assessing in the following types of Units and assessments:

- HN Graded Units
- Course and/or external assessments
- Other integrative assessment Units (which may or not be graded)
- Certain types of assessment instruments where the standard may be compromised by not using the same assessment method outlined in the Unit
- Where there is an existing requirement for a licence to practice
- Where there are specific health and safety requirements
- Where there are regulatory, professional or other statutory requirements
- Where otherwise specified in an Assessment Strategy

More information and guidance on the *Recognition of Prior Learning* (RPL) may be found on our website **www.sqa.org.uk**.

The following sub-sections outline how existing SQA Unit(s) may contribute to this Group Award. Additionally, they also outline how this Group Award may be recognised for professional and articulation purposes.

6.2.1 Articulation and/or progression

The qualification does not currently articulate with a particular degree programme but may do so in the future

6.2.2 Professional recognition

The qualification will be recognised by the British Association of Prosthetists and Orthotists (BAPO) and British Healthcare Trades Association (BHTA). It is also hoped that it will gain the International Society of Prosthetics and Orthotics (ISPO) approval.

6.3 Opportunities for e-assessment

Due to the predicted widespread location of the candidates undertaking this qualification it is anticipated that the five mandatory Units will be taught and assessed using blended teaching and assessment approaches. The optional Units will be taught and assessed at the candidate's manufacturing workplace.

6.4 Support materials

Not applicable.

6.5 Resource requirements

The PDA is a specialist award and it is recommended that it is delivered by centres that have the knowledge and understanding of working with Orthotic, Prosthetic and Orthopaedic Footwear manufacture services. Centre staff should be able to demonstrate this knowledge and understanding, particularly as they will be supporting learners who work in the field. It is recommended that centre staff are subject specialists.

7 General information for centres

Equality and inclusion

The Unit specifications making up this Group Award have been designed to ensure that there are no unnecessary barriers to learning or assessment. The individual needs of learners will be taken into account when planning learning experiences, selecting assessment methods or considering alternative evidence. Further advice can be found on our website **www.sqa.org.uk/assessmentarrangements**.

Internal and external verification

All instruments of assessment used within this qualification should be internally verified, using the appropriate policy within the centre and the guidelines set by SQA.

External verification will be carried out by SQA to ensure that internal assessment is within the national guidelines for these qualifications.

Further information on internal and external verification can be found in *SQA's Guide to Assessment* **(www.sqa.org.uk/GuideToAssessment)**.

8 Glossary of terms

Embedded Core Skills: is where the assessment evidence for the Unit also includes full evidence for complete Core Skill or Core Skill components. A learner successfully completing the Unit will be automatically certificated for the Core Skill. (This depends on the Unit having been successfully audited and validated for Core Skills certification.)

Finish date: The end of a Group Award's lapsing period is known as the finish date. After the finish date, the Group Award will no longer be live and the following applies:

- candidates may not be entered for the Group Award
- the Group Award will continue to exist only as an archive record on the Awards Processing System (APS)

Lapsing date: When a Group Award is entered into its lapsing period, the following will apply:

- the Group Award will be deleted from the relevant catalogue
- the Group Award specification will remain until the qualification reaches its finish date at which point it will be removed from SQA's website and archived
- no new centres may be approved to offer the Group Award
- centres should only enter candidates whom they expect to complete the Group Award during the defined lapsing period

SQA credit value: The credit value allocated to a Unit gives an indication of the contribution the Unit makes to an SQA Group Award. An SQA credit value of 1 given to an SQA Unit represents approximately 40 hours of programmed learning, teaching and assessment.

SCQF: The Scottish Credit and Qualification Framework (SCQF) provides the national common framework for describing all relevant programmes of learning and qualifications in Scotland. SCQF terminology is used throughout this guide to refer to credits and levels. For further information on the SCQF visit the SCQF website at **www.scqf.org.uk**.

SCQF credit points: SCQF credit points provide a means of describing and comparing the amount of learning that is required to complete a qualification at a given level of the Framework. One National Unit credit is equivalent to 6 SCQF credit points. One National Unit credit at Advanced Higher and one Higher National Unit credit (irrespective of level) is equivalent to 8 SCQF credit points.

SCQF levels: The level a qualification is assigned within the framework is an indication of how hard it is to achieve. The SCQF covers 12 levels of learning. HNCs and HNDs are available at SCQF levels 7 and 8 respectively. Higher National Units will normally be at levels 6–9 and Graded Units will be at level 7 and 8. National Qualification Group Awards are available at SCQF levels 2–6 and will normally be made up of National Units which are available from SCQF levels 2–7.

Subject Unit: Subject Units contain vocational/subject content and are designed to test a specific set of knowledge and skills.

Signposted Core Skills: refers to opportunities to develop Core Skills arise in learning and teaching but are not automatically certificated.

History of changes

It is anticipated that changes will take place during the life of the qualification and this section will record these changes. This document is the latest version and incorporates the changes summarised below. Centres are advised to check SQA's APS Navigator to confirm they are using the up to date qualification structure.

NOTE: Where a Unit is revised by another Unit:

- No new centres may be approved to offer the Unit which has been revised.
- Centres should only enter candidates for the Unit which has been revised where they are expected to complete the Unit before its finish date.

Version Number	Description	Date

Acknowledgement

SQA acknowledges the valuable contribution that Scotland's colleges have made to the development of this qualification.

9 General information for learners

This section will help you decide whether this is the qualification for you by explaining what the qualification is about, what you should know or be able to do before you start, what you will need to do during the qualification and opportunities for further learning and employment.

Professional Development Award (PDA) in Rehabilitation Technologies at SCQF level 7 is a new award and has been designed to meet the range of skills and knowledge required to develop and improve practice. This award has been developed for those who have experience in an Orthotic, Prosthetic or Orthopaedic Footwear manufacturing environment or for those who which to pursue a career in an Orthotic, Prosthetic or Orthopedic Footwear manufacturing environment.

The award has been designed with a wide variety of optional Units to cover whichever workplace environment the candidate is working in, your employer will liaise with you to decide whichever Units would be more appropriate to your workplace. The qualification is suitable for candidates working for the NHS or companies supplying a service to the NHS or the Private sector

The PDA in Rehabilitation Technologies is suitable for those who have:

- sufficient experience as a Technician in an Orthotic, Prosthetic or Orthopaedic Footwear manufacturing environment.
- currently training as a Technician in an Orthotic, Prosthetic or Orthopaedic Footwear manufacturing environment.

All of the Evidence Requirements within each of the Units must be evidenced and you will be guided through this by your tutor/assessor.

Each of the Units you undertake will be assessed. This may be though a variety of methods including; practical demonstrations, assignments, short answer questions, reflective accounts and presentations.

Whilst undertaking this award you will have the opportunity to develop your Core Skills that includes; *Communication, Working with Others, Problem Solving, Information and Communication Technology (ICT)*.