



PROSTHETIST AND ORTHOTIST



Details of standard

Occupation summary

A prosthetist and orthotist is a registered clinician. This unique occupation provides the opportunity to practise in two areas of healthcare. Most will specialise in prosthetics or orthotics; a small number continue in both. **Prosthetists** Provide gait (walking) analysis and engineering solutions to service users with limb(s) loss. They are trained in mechanics, biomechanics, and material science along with anatomy, physiology and pathophysiology. They are able to design, provide and modify prostheses that replicate the structural or functional characteristics of a service user's absent limb(s). They provide care to service users with congenital (from birth) limb loss, as well as those with limb loss due to conditions including diabetes, reduced vascularity, infection and trauma. **Orthotists** Provide gait (walking) analysis and engineering solutions to service users with problems of the neuro, muscular and skeletal systems. They consider a range of factors when assessing service users, including mechanics, biomechanics, material science, anatomy, physiology and pathophysiology. They design and provide orthoses that modify the structural or functional characteristics of a service user's neuro, muscular and skeletal systems, enabling them to mobilise, eliminate gait deviations (improve walking), reduce falls, reduce pain, prevent and facilitate healing of ulcers and prevent physical deformities from progressing. They fit and modify orthoses and are accountable and responsible for the impact of any changes.

Prosthetists and orthotists manage their own caseloads, working across all age ranges and with a wide variety of conditions, often providing lifetime care. Whilst acting as autonomous practitioners, with leadership and management responsibilities, they work collaboratively as a key part of a Multi-Disciplinary Team (MDT) to provide holistic care through the provision of rehabilitation and long-term care. Prosthetists and orthotists work for both the NHS and independent companies. Prosthetists and orthotists demonstrate confidence, compassion, competency and effective judgement about risk and are responsible and accountable for their decisions. A prosthetist and orthotist instruct and guide their technicians in the specification and manufacture of prostheses and orthoses. They also advise them in matters of interaction and care when the technicians are dealing directly with service users; for example, for repairs. They use current evidence to evaluate the effectiveness of their practice, with the aim of continually improving outcomes for service users. They are responsible for ensuring their own knowledge and skills are current and support the development of others.

In their daily work, a prosthetist and orthotist interacts with:

- Service users, their families and carers in clinical settings, such as hospitals, community clinics, care homes and general practices
- Prosthetist and orthotist technicians

- Other health and social care professionals; for example, doctors, nurses, physiotherapists, occupational therapists and care workers
- Administrative and clerical staff providing support to the prosthetics and orthotics team

Typical job titles include:

Prosthetist and orthotist

Entry requirements

Apprentices will have to meet the entry requirements set by the university. They must also have achieved Level 2 English and maths prior to starting this apprenticeship.

Occupation duties

DUTY	KSBS
Duty 1 Practise safely and effectively within the scope of practice and within the legal and ethical boundaries of the profession.	K1 K2 K3 K4 K5 K6 K7 K8 S1 S2 S3 S4 S5 S6 S7 S8 S9 S10 S11
Duty 2 Look after own health and wellbeing, seeking appropriate support where necessary.	K9 K10 S12 S13
Duty 3 Practise as an autonomous professional, exercising professional judgement.	K11 S14 S15 S16 S17 S18 S19 S20 S21 B2
Duty 4 Practise in a non-discriminatory and inclusive manner recognising the impact of culture, equality and diversity.	K12 K13 K14 K15 K16 K17 S22 S23 S24 B1
Duty 5 Communicate effectively, maintaining confidentiality and records appropriately.	K18 K19 K20 K21 K22 K23 K24 K25 S25 S26 S27 S28 S29 S30 S31 S32 S33 S34
Duty 6 Work with others.	K26 K27 K28 K29 K30 S35 S36 S37 S38 S39 S40 S41 B5
Duty 7 Reflect on, review and assure the quality of own practice.	K31 K32 K33 S42 S43 S44 S45 S46 S47 B4
Duty 8 Draw on appropriate knowledge and skills to inform practice and apply the key concepts of the knowledge base relevant to the profession.	K34 K35 K36 K37 K38 K39 K40 K41 K42 K43 K44 K45 K46 S48 S49 S50 S51 S52 S53 S54 S55 S56 S57 S58 S59 S60 S61 S62 S63 S64 S65 S66 S67 S68 S69 B3
Duty 9 Establish and maintain a safe practice environment.	K47 K48 K49 K50 S70 S71 S72 S73 S74

Duty 10 Promote public health and prevent ill health .

K51 K52

S75 S76

KSBs

Knowledge

K1: The importance of continuing professional development throughout own career.

K2: The importance of safeguarding, signs of abuse and relevant safeguarding processes.

K3: What is required of them by the Health and Care Professions Council, including but not limited to the Standards of conduct, performance and ethics.

K4: The importance of valid consent.

K5: The importance of capacity in the context of delivering care and treatment.

K6: The scope of a professional duty of care, and how to exercise that duty.

K7: Legislation, policies and guidance relevant to own profession and scope of practice.

K8: The quality guidelines and device design principles that apply to the specifications of individual devices.

K9: The importance of own mental and physical health and wellbeing strategies in maintaining fitness to practise.

K10: How to take appropriate action if own health may affect own ability to practise safely and effectively, including seeking help and support when necessary.

K11: The need for active participation in training, supervision and mentoring in supporting high standards of practice, and personal and professional conduct, and the importance of demonstrating this in practice.

K12: Equality legislation and how to apply it to own practice.

K13: The duty to make reasonable adjustments in practice and be able to make and support reasonable adjustments in own and others' practice.

K14: The characteristics and consequences of barriers to inclusion, including for socially isolated groups.

K15: How regard to equality, diversity and inclusion needs to be embedded in the application of all HCPC standards and across all areas of practice.

K16: The psychology of loss and disability as it affects and influences prosthetic and orthotic management, and be able to apply such understanding to clinical decision-making.

K17: The social factors affecting the rehabilitation of service users.

K18: When disclosure of confidential information may be required.

K19: The principles of information and data governance and the safe and effective use of health, social care and other relevant information.

K20: The need to ensure confidentiality is maintained in all situations in which service users rely on additional communication support, such as interpreters or translators.

K21: That the concepts of confidentiality and informed consent extend to all mediums, including illustrative clinical records such as photography, video and audio recordings and digital platforms.

K22: The characteristics and consequences of verbal and non-verbal communication and recognise how these can be affected by difference of any kind including, but not limited to, protected characteristics, intersectional experiences and cultural differences.

K23: The need to support the communication needs of service users and carers, such as through the use of an appropriate interpreter.

K24: The need to provide service users or people acting on own behalf with the information necessary in accessible formats to enable them to make informed decisions.

K25: The need for effective communication with technical staff to ensure the appropriateness and quality of prostheses and orthoses.

K26: The principles and practices of other health and care professionals and systems and how they interact with own profession.

K27: The need to build and sustain professional relationships as both an autonomous practitioner and collaboratively as a member of a team.

K28: The qualities, behaviours and benefits of leadership.

K29: That leadership is a skill all professionals can demonstrate.

K30: The need to engage service users and carers in planning and evaluating diagnostics, and therapeutic interventions to meet own needs and goals.

K31: The value of reflective practice and the need to record the outcome of such reflection to support continuous improvement.

K32: The value of multi-disciplinary reviews, case conferences and other methods of review.

K33: The value of gathering and using data for quality assurance and improvement programmes.

K34: The structure and function of the human body, together with knowledge of physical and mental health, disease, disorder and dysfunction relevant to their profession.

K35: The role(s) of other professions and services in health and social care and how they may relate to the role of prosthetists/orthotists.

K36: The structure and function of health and social care systems and services in the UK.

K37: The theoretical basis of, and the variety of approaches to, assessment and intervention.

K38: Human structure and function, especially the human musculoskeletal system.

K39: The aetiology and pathophysiology of human disease and general genetic principles relevant to prosthetic or orthotic practice, and recognise when disorders are not amenable to prosthetic or orthotic treatment.

K40: The structure and properties of materials and their appropriate application to prosthetic or orthotic hardware and clinical practice.

K41: Biomechanical principles and the appropriate application of forces to the human body following prescription and supply of a prosthesis or orthosis.

K42: The biomechanics of gait and interventions.

K43: The theoretical basis of prosthetic and orthotic science.

K44: A range of research methodologies relevant to own role.

K45: The value of research to the critical evaluation of practice.

K46: The need to maintain all equipment to a high standard.

K47: The need to maintain the safety of themselves and others, including service users, carers and colleagues.

K48: Relevant health and safety legislation and local operational procedures and policies.

K49: Appropriate moving and handling techniques.

K50: How to position or immobilise service users correctly for safe and effective interventions.

K51: The role of own profession in health promotion, health education and preventing ill health.

K52: How social, economic and environmental factors, wider determinants of health, can influence a person's health and well-being.

Skills

S1: Identify the limits of own practice and when to seek advice or refer to another professional or service.

S2: Recognise the need to manage own workload and resources safely and effectively, including managing the emotional burden that comes with working in a pressured environment.

S3: Keep own skills and knowledge up to date.

S4: Maintain high standards of personal and professional conduct.

S5: Engage in safeguarding processes where necessary.

S6: Respect and uphold the rights, dignity, values, and autonomy of service users, including own role in the assessment, diagnostic, treatment and/or therapeutic process.

S7: Promote and protect the service user's interests at all times.

S8: Recognise that relationships with service users, carers and others should be based on mutual respect and trust, and maintain high standards of care in all circumstances.

S9: Obtain valid consent, which is voluntary and informed, has due regard to capacity, is proportionate to the circumstances and is appropriately documented.

S10: Apply legislation, policies and guidance relevant to own profession and scope of practice.

- S11:** Recognise the power imbalance which comes with being a health care professional, and ensure it is not for personal gain.
- S12:** Identify own anxiety and stress and recognise the potential impact on own practice.
- S13:** Develop and adopt clear strategies for physical and mental self-care and self-awareness, to maintain a high standard of professional effectiveness and a safe working environment.
- S14:** Recognise that they are personally responsible for, and must be able to, justify their decisions and actions.
- S15:** Use own skills, knowledge and experience, and the information available, to make informed decisions and/or take action where necessary.
- S16:** Make reasoned decisions to initiate, continue, modify or cease treatment or the use of techniques or procedures, and record the decisions and reasoning appropriately.
- S17:** Make and receive appropriate referrals, where necessary.
- S18:** Exercise personal initiative.
- S19:** Demonstrate a logical and systematic approach to problem solving.
- S20:** Use research, reasoning and problem-solving skills when determining appropriate actions.
- S21:** Make reasoned decisions to accept or decline requests for intervention.
- S22:** Respond appropriately to the needs of all different groups and individuals in practice, recognising this can be affected by difference of any kind including, but not limited to, protected characteristics, intersectional experiences and cultural differences.
- S23:** Recognise the potential impact of own values, beliefs and personal biases, which may be unconscious, on practice and take personal action to ensure all service users and carers are treated appropriately with respect and dignity.
- S24:** Actively challenge barriers to inclusion, supporting the implementation of change wherever possible.
- S25:** Adhere to the professional duty of confidentiality.
- S26:** Respond in a timely manner to situations where it is necessary to share information to safeguard service users, carers and/or the wider public and recognise situations where it is necessary to share information to safeguard service users, carers and/or the wider public.
- S27:** Use effective and appropriate verbal and non-verbal skills to communicate with service users, carers, colleagues and others.
- S28:** Communicate in English to the required standard for their profession.
- S29:** Work with service users and/or own carers to facilitate the service user's preferred role in decision-making, and provide service users and carers with the information they may need where appropriate.
- S30:** Modify own means of communication to address the individual communication needs and preferences of service users and carers, and remove any barriers to communication where possible.
- S31:** Use information, communication and digital technologies appropriate to own practice.

- S32:** Keep full, clear and accurate records in accordance with applicable legislation, protocols and guidelines.
- S33:** Manage records and all other information in accordance with applicable legislation, protocols and guidelines.
- S34:** Use digital record keeping tools, where required.
- S35:** Work in partnership with service users, carers, colleagues and others.
- S36:** Contribute effectively to work undertaken as part of a multi-disciplinary team.
- S37:** Identify anxiety and stress in service users, carers and colleagues, adapting own practice and providing support where appropriate.
- S38:** Identify own leadership qualities, behaviours and approaches, taking into account the importance of equality, diversity and inclusion.
- S39:** Demonstrate leadership behaviours appropriate to own practice.
- S40:** Act as a role model for others.
- S41:** Promote and engage in the learning of others.
- S42:** Engage in evidence-based practice.
- S43:** Gather and use feedback and information, including qualitative and quantitative data, to evaluate the responses of service users to own care.
- S44:** Monitor and systematically evaluate the quality of practice, and maintain an effective quality management and quality assurance process working towards continual improvement.
- S45:** Participate in quality management, including quality control, quality assurance, clinical governance and the use of appropriate outcome measures.
- S46:** Evaluate care plans or intervention plans using recognised and appropriate outcome measures, in conjunction with the service user where possible, and revise the plans as necessary.
- S47:** Evaluate the supply, fit and delivery of any device on an ongoing basis as part of the review mechanism, including the body – device interface, functional alignment, mechanical integrity, functional suitability, cosmesis, clinical effectiveness, and the needs and expectations of service users.
- S48:** Demonstrate awareness of the principles and applications of scientific enquiry, including the evaluation of treatment efficacy and the research process.
- S49:** Change own practice as needed to take account of new developments, technologies and changing contexts.
- S50:** Gather appropriate information.
- S51:** Analyse and critically evaluate the information collected.
- S52:** Select and use appropriate assessment techniques and equipment.
- S53:** Undertake and record a thorough, sensitive, and detailed assessment.

- S54:** Undertake or arrange investigations as appropriate.
- S55:** Conduct appropriate assessment or monitoring procedures, treatment, therapy or other actions safely and effectively.
- S56:** Critically evaluate research and other evidence to inform own practice.
- S57:** Engage service users in research as appropriate.
- S58:** Formulate specific and appropriate management plans including the setting of timescales.
- S59:** Use equipment and machinery appropriately to capture and modify anthropometric, kinetic, and kinematic data safely and effectively.
- S60:** Provide, where appropriate, a suitable cast or electronic data to accompany the written information.
- S61:** Use contemporary technologies that aid service user assessment.
- S62:** Complete an accurate clinical assessment.
- S63:** Demonstrate awareness of the weight and potential level of activity of service users, and the uses that prostheses or orthoses will be subject to, as part of health and safety assessments.
- S64:** Measure and cast for prostheses and orthoses and, where necessary, rectify them.
- S65:** Prescribe orthotic or prosthetic treatment including, where necessary, the specification for manufacture, and recognise the need to carry out risk analyses where required for unapproved combinations or applications of components.
- S66:** Analyse normal and abnormal gait, locomotor function and movement using both qualitative and quantitative means.
- S67:** Assess factors important to the relevant design specification of prostheses and orthoses and apply these when designing a device.
- S68:** Conduct neurological, vascular, biomechanical and dermatological assessments in the context of prosthetics and orthotics.
- S69:** Use a systematic approach to formulate a clinical diagnosis.
- S70:** Demonstrate awareness of relevant health and safety legislation and comply with all local operational procedures and policies.
- S71:** Work safely, including being able to select appropriate hazard control and risk management, reduction or elimination techniques in a safe manner and in accordance with health and safety legislation.
- S72:** Select appropriate personal protective equipment and use it correctly.
- S73:** Establish safe environments for practice, which appropriately manages risk.
- S74:** Apply appropriate moving and handling techniques.
- S75:** Empower and enable individuals, including service users and colleagues, to play a part in managing own health.

S76: Engage in occupational health, including being aware of immunisation requirements.

Behaviours

B1: Treat people with dignity, respecting diversity, beliefs, culture, needs, values, privacy and preferences.

B2: Demonstrate respect and empathy for those with whom you work and have the courage to challenge areas of concern.

B3: Demonstrate a commitment to evidence-based best practice and consensus working.

B4: Be adaptable, reflective, reliable and consistent.

B5: Demonstrate discretion, resilience, self-awareness and leadership.

Qualifications

English and Maths

Apprentices without level 2 English and maths will need to achieve this level prior to taking the End-Point Assessment. For those with an education, health and care plan or a legacy statement, the apprenticeship's English and maths minimum requirement is Entry Level 3. A British Sign Language (BSL) qualification is an alternative to the English qualification for those whose primary language is BSL.

Other mandatory qualifications

Apprentices will be required to complete a BSc (Hons) degree in Prosthetics and Orthotics or Level 7 qualification approved by the Health and Care Professions Council (HCPC) where the apprentice already holds a Level 6 degree

Level: 6 (integrated degree)

Training provider must be approved by regulator body. EPAO must be approved by regulator body

MSc in Prosthetics and Orthotics

Level: 7 (integrated degree)

Training provider must be approved by regulator body. EPAO must be approved by regulator body

Additional details

Regulated standard

This is a regulated occupation.

Regulator body:

Health and Care Professions Council

Training Provider must be approved by regulator body

EPAO must be approved by regulator body

Occupational Level:

6

Duration (months):

48

Review

Example progression routes

Enhanced clinical practitioner

Advanced clinical practitioner (integrated degree)

Version log

VERSION	CHANGE DETAIL	EARLIEST START DATE	LATEST START DATE	LATEST END DATE
1.2	Standard, end-point assessment plan and funding band revised but funding remained the same.	01/09/2023	Not set	Not set
1.1	Funding band revised but remains £24000. End-point assessment plan revised	10/11/2021	31/08/2023	Not set
1.0	Retired	31/10/2018	09/11/2021	Not set

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