

BBTS Specialist Certificate in Clinical Transfusion Practice

Guide for Prospective Students and their Employers

Overview

Award:	BBTS Specialist Certificate in Clinical Transfusion Practice <i>Accredited by The University of Manchester (45 level 7 / Master's level credits)</i>
Duration:	12 months (programme begins in November)
Delivery:	Distance-learning/ e-learning
Entry Requirements:	<p>You must:</p> <ul style="list-style-type: none"> • have a BSc in a relevant healthcare science or demonstrable equivalent <ul style="list-style-type: none"> ○ e.g. candidates with NMC or NMBI, HCPC or ACSLM registration, but without a BSc, are deemed to have demonstrable equivalence • be working at practitioner level (NHS career framework grade 5 equivalent) or higher • be working in a hospital or transfusion laboratory environment during the programme of study • be a member of the BBTS <p>If you do not meet these minimum requirements your application will be automatically rejected</p>
How to Apply:	<p>Applications are open once each year for 6 weeks. Next enrolment period: 16th April – 31st May 2018 Applications will not be considered outside these dates. Your application must be supported by your manager for the duration of the programme. Key Course dates: Induction 08th November 2018; Examination November 2019</p>
Course Description:	<p>This course is designed to provide you with a thorough grounding in the theory and practice of clinical transfusion as conducted within the modern clinical transfusion setting. It is designed for</p> <ul style="list-style-type: none"> • Transfusion Nurses and Practitioners working in clinical transfusion environments • Biomedical Scientists, Clinical Scientists and Healthcare Practitioners working in transfusion requiring/ wanting specialist knowledge in clinical aspects of transfusion • NHS Higher Specialist Scientific Training scheme students with 'gaps' in training provision • Nurses with an interest in clinical transfusion <p>Over the programme you will build and consolidate your core knowledge and understanding of clinical transfusion practice, while developing your analytical and practical skills required for data interpretation, critical thinking and provision of solutions to differing clinical situations. See Appendix 1 for full description of each unit.</p>
Fees:	<p>Programme cost: £891 Fees include course tuition, learning materials and administration costs during your studies.</p>
Contact:	<p>Education Officer: Michaela Cheetham For all enquiries: Email: michaela.cheetham@bbts.org.uk or bbts@bbts.org.uk Telephone: 0161 232 7999</p>

Introduction

The BBTS Specialist Certificate in Clinical Transfusion Practice is designed for UK Nursing and Midwifery (NMC) registered professionals* and Health and Care Professions Council (HCPC) registered Biomedical Scientists (BMS)* working in transfusion in a hospital clinical environment, a hospital transfusion laboratory or blood establishment (blood centre).

*** Note:**

- Republic of Ireland Healthcare professionals, specifically
 - Nursing and Midwifery Board of Ireland (NMBI) registered Nurses/ Midwives
 - Academy of Medical Laboratory Science (AMLS) registered Medical Scientistsare also welcome to apply.
- Non-HCPC registered NHS employees working in transfusion must be working at career grade 5 (or higher) to be eligible. This is typically equivalent to entry-level BMS/ nurse staff grade.
- Applications from overseas scientists working in blood transfusion will be considered on a case-by-case basis but must also meet the minimum eligibility criteria.
- Please note that this qualification is based on UK practices and guidelines.

This qualification will provide you with evidence of specialist knowledge* in clinical transfusion, following NMC or HCPC registration at practitioner level, required to demonstrate your specialist and independent practice capabilities. It is accredited by the University of Manchester (45 level 7 credits).

**The BBTS Specialist Certificate is not a certificate of competence to practice; the assessment of competence remains the responsibility of your employer.*

This programme of study will build and consolidate your core knowledge and understanding of clinical transfusion, while developing your analytical and practical skills required for data interpretation, critical thinking and provision of solutions to differing clinical situations, commensurate with the level of Specialist Practitioner in Clinical Transfusion (NHS career framework grade 6 and above).

Minimum eligibility criteria for all applicants

You must:

- have a BSc in a relevant healthcare science (or demonstrable equivalent)
 - candidates with NMC, NMBI, HCPC or AMLS registration, but without a BSc, are deemed to have demonstrable equivalence
- be working at practitioner level (NHS career framework grade 5 equivalent) or higher
 - applications from trainee registrants will not be considered
- be working in a transfusion environment during the programme of study*
- be a member of the BBTS on application and throughout the programme

And preferably have:

- previous experience of working in a transfusion environment at practitioner level (recommendation: minimum of 6 months)

**prospective applicants who will not be working in a transfusion environment during the programme will not normally be considered eligible. Individual requests may be taken under consideration.*

English Language Proficiency for International Applicants

Where English is an additional language you must provide the following test certificate(s):

- International English Language Testing System (IELTS).
 - Minimum Score: 7.0 with no element below 6.5

Or

- Test of English as a Foreign Language (TOEFL iBT)
 - Minimum score: 100/120
- TOEFL test scores undertaken in the United Kingdom are not accepted

All test certificates must be dated within 2 years of the date on which we receive your application

Exemption from language proficiency test

If you are a citizen of a relevant European State you do not need to provide proof of your English language proficiency. To be exempt from providing proof of English language competence you must provide evidence that you are a citizen of a relevant European State. This will usually be a **certified** copy of your passport or a **certified** copy of your national identity card.

The relevant European States are:

Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, The Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

Units and Descriptors

The course comprises 3 units studied over a 12 month programme; all units are compulsory

Unit 1: Essential Haematology and Transfusion (10 credits)

This unit will provide you with underpinning knowledge and understanding of a broad range of topics within haematology and transfusion. You will become familiar with methods and strategies to investigate, and gain experience of the interpretation of, routine and complex patient related results. You will be expected to relate this knowledge to the workplace as you learn to perform relevant clinical investigations.

Unit 2: Transfusion Therapy (20 credits)

This unit will provide you with knowledge and understanding of clinical transfusion practice with respect to patients requiring blood transfusions and appropriate clinical investigations. You will become familiar with methods and strategies to evaluate, investigate and gain experience of transfusion of blood components in range of patients in a range of clinical scenarios. You will be expected to relate this knowledge to the workplace as you learn to perform relevant clinical investigations.

Unit 3: Transfusion Management and Organisational Practice (15 credits)

This unit will provide you with knowledge and understanding of clinical transfusion practice with respect to patient and organisational blood management. You will understand the requirements for effective patient blood management with respect to patient benefit, sustainability and cost. You will become familiar with methods and strategies to evaluate, investigate and gain experience of haemovigilance, conservation, transfusion alternatives and audit practices. You will be expected to relate this knowledge to the workplace as you learn to perform relevant clinical investigations.

See Appendix 1 for full unit descriptions

Programme of Study

The course is delivered via a 12 month structured online curriculum of distance learning through the BBTS website. The timetable is as follows:

Start: 8th November 2018

Induction Day

A face-to-face Induction Day in Manchester marks the start of the programme. If you are unable to attend, all relevant information will be made available online shortly after the event.

Finish: November 2019

Examination

The final examination marks the end of the programme. This takes place in **Manchester* on the 2nd or 3rd Saturday in November 2019**. The date will be confirmed and all students informed in spring 2019.

The examination takes place over a full day

- Paper 1 begins at 10 am (with entry no later than 9.45 am)
- Finish time is 3 pm.

**the centralised examination venue and date of exam are non-negotiable*

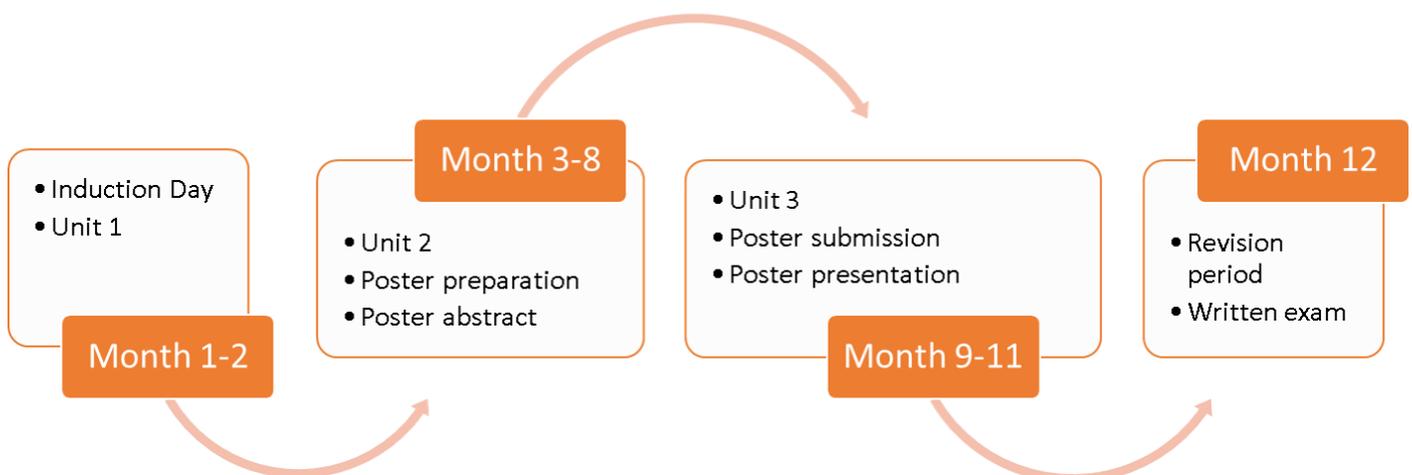
Please note that the assessment for this programme is a 2-part process.

As well as the endpoint examination **you will be required to produce and submit a professional poster for assessment during the programme.**

Programme running order:

Learning materials are normally released on the second or third Wednesday of each month.

All materials will remain available to review, once published, until the examination date.



Timetable at a glance (2018 to 2019)

14th November: Haemostasis and platelet physiology. Pathology of anaemia and haematological diseases (overview)

12th December: Management of blood components in the hospital: Part 1.

Epidemiology of blood transfusion.

Adverse effects of transfusion: Part 1.

16th January: Transfusion in surgery

- Pre-operative assessment including anaemia and coagulation problems
- Cell salvage and blood sparing surgery
- Acute bleeding
- Post-operative transfusion thresholds
- Cardiac surgery and bypass

Transfusion in critical care

- The routine and/ or restrictive use of blood components in critically ill patients.
- Transfusion triggers and thresholds.

13th February: Transfusion in surgery and critical care (continued)

- Major haemorrhage in a range of patient groups.

Transfusion in Medical Patients

- Transfusion management strategies for a range of inherited haemoglobinopathies.

13th March: Problems associated with chronic transfusion

Transfusion management of patients with haemolytic anaemias and thrombocytopenia's

Use of blood components in patients with cancer

10th April: Anaemias and haematological disease occurring in pregnancy

Obstetric massive transfusion, antepartum haemorrhage and postpartum haemorrhage

8th May: Haemolytic disease of the fetus and newborn (HDFN)

Anti-D prophylaxis

5th June: Transfusion in children

Transfusion in transplantation

17th July: Adverse effects of transfusion: Part 2.

Management of blood components in the hospital: Part 2.

14th August: Alternatives and adjuncts to transfusion

Therapeutic Apheresis

Quality, regulation and clinical audit with respect to the clinical area

18th September: Transfusion Liaison (laboratory, transfusion practitioner and clinical area/ user interactions and communication)

Transfusion practices outside the UK

16th October: Revision period

How will I study?

To gain 45 level 7 credits students are expected to participate in 10 hours of scheduled learning activities per credit (i.e. 450 hours in total). This figure is calculated based on the average time a learner takes to achieve the specified learning outcomes.

Examples of learning activities include taught sessions, independent and self-directed study, and work-based events.

To be successful, **active** participation in the programme is required. This is monitored during the 12 month programme through the **compulsory discussion activities** (CDA) posted on the online student forum.

The following resources are supplied for this programme:

- Online presentations
 - Including self-check quizzes
- Online compulsory discussion activities (CDAs)
 - *You must complete 75% of the CDAs to be eligible to sit the exam*
 - You can also use the forum to ask, discuss and answer any questions with your fellow students
- Essential, directed and recommended reading
 - Each online package will highlight and signpost you to the required reading
- Revision; multiple choice quizzes/ mini-assessments to reflect exam layout

Learning at work while undertaking this programme

One aim of this programme is to link your underpinning and specialist knowledge with your everyday transfusion practice. In addition, it will expand and deepen your understanding of those aspects of clinical transfusion with which you may be less accustomed. It is expected that you will use your experiences of routine working in a clinical setting, hospital transfusion laboratory or blood services laboratory (or all) during this programme to help you consolidate your learning.

As each person's experience in blood transfusion practice is different, your particular capabilities and learning requirements will vary. BBTS therefore encourages you to plan your learning over the coming year with your workplace training officer and/ or mentor. During the programme you will be directed to complete some specific action points at your workplace.

It is highly recommended that you arrange the following:

- An initial meeting with your training officer/ mentor before you begin your studies
 - To highlight any work-based development needs
 - To arrange any additional training or experiences that may help with the programme
- Following this, regular update and progress report meetings are highly recommended
 - e.g. once per month
 - to help keep you on target with your studying

Please note: BBTS is not responsible for provision of a work-place training officer or mentor.

All types of workplace activities can be used as a source of material to supplement your learning. This may include (this list is not exhaustive):

- Regular duties and investigations
- Following procedures and guidelines
- Referring to procedures and guidelines
- Writing, reviewing and validating standard operating procedures
- Unusual or complex patient investigations
- Internal and external quality assessment scheme participation
- Liaising with other departments and services (e.g. patient blood management team, blood issuing department, patient laboratory, hospital transfusion committee, regional transfusion committee, transfusion practitioner, etc.)
- Shadowing a colleague
- Validation/ evaluation of clinical equipment
- Involvement in quality incident/ haemovigilance reporting
- Involvement with departmental audits

In addition, you will find it beneficial to engage with your own local experts, colleagues and peers in your workplace during your studies. Your attendance at local and national CPD events is encouraged where possible (e.g. NEQAS meetings, Regional Transfusion Committee education days, user groups, journal clubs, conferences, special interest groups etc.).

Who will be teaching me?

All course materials are designed and delivered by a team of BBTS members with specialist expertise in clinical transfusion practice, education and training.

Course leads:

- Dr Jonathan Wallis, Consultant Haematologist, Freeman Hospital.
- Dr Balsam Altemimi, Consultant Trauma Anaesthetist, Aintree University Hospital NHS Foundation Trust.
- Andrea Harris, Diagnostic & Therapeutic Services: Professional Nursing Lead, NHS Blood and Transplant.
- Jenny White, Scheme Manager UK NEQAS (BTLP).

How will I be assessed?

There are a series of self-assessments, discussion and review activities during the 12 month programme designed to prepare you for summative assessment.

The assessment is a **two-part process** comprising:

1. Poster (25% weighting of final mark):

This comprises production, submission and presentation of a clinical poster (plus abstract) at the BBTS annual meeting (autumn 2019). Guidance on the process and submission will be given over the course of the programme. Attendance at the poster presentation session is strongly encouraged but is not compulsory.

2. Examination (75% weighting of final mark):

Paper	Compulsory		
	A	B	C
Question Type	Multi-Choice	Short answer	Data Interpretation and Case Studies
Duration	60 mins	60 mins	120 mins
Weighting	25% (of written exam)	25% (of written exam)	50% (of written exam)

Grading criteria is outlined in the terms and conditions (appendix 2).

Student Representative

As part of the Specialist Certificate in Clinical Transfusion Practice programme we encourage one individual to act as student representative for the cohort.

This is a voluntary role and great opportunity to get involved with BBTS, help your fellow students and shape the future delivery of the programme. It’s also good for your CPD!

Expectations

The main role is to be an additional* contact for any student feedback and/ or concerns. You will be required to

- attend the Programme Committee meetings
 - 1-2 face to face and/ or 1-2 teleconferences over the programme year
 - make students’ views/ feedback known
 - feedback responses from the BBTS Programme Committee to the student cohort
- Reasonable travel expenses are paid

*we encourage and welcome direct feedback and contact from all our students at any time but recognise that sometimes students would rather give this via a third independent party.

Feedback

We will seek formal student feedback at different points over the programme via anonymous questionnaires. The purpose of this is to check how you're getting on and for you to comment on the programme and your experience so far. Additionally, you may feedback individually to us at any time you wish; directly at bbts@bbts.org.uk or via your student representative.

We will formally ask for your feedback at the following intervals

- Post Induction
- Mid programme
- Post-examination/ pre-results

All results and responses will be published in the student area for you to view. We will also add comments from previous cohorts that you may find useful.

Your supporting manager will also be asked for their feedback (by questionnaire) following issue of the cohort's results.

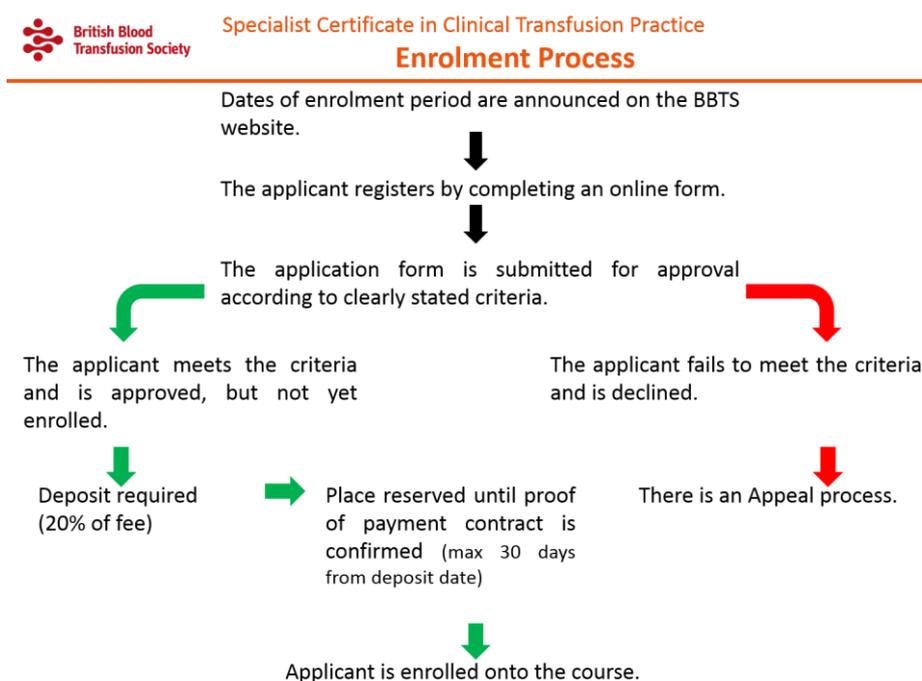
The Enrolment Process

Enrolment for this programme is between 16th April – 31st May each year (6 weeks). A link to the application form is provided on the BBTS website. Applications outside this time will not be considered.

All applications are checked against the eligibility criteria for approval. If you meet the criteria, you will be approved and your place reserved until your deposit is received.

Confirmed enrolment requires a payment deposit of 20% of the full fee by 31st July (in the year of your enrolment). Non-payment of the deposit may result in your reserved place being rescinded.

NB. If you do not meet the minimum eligibility criteria stated you will not be approved. You may appeal this decision or request feedback/advice about reapplying in the future. If required, please email your appeal or request to the BBTS Education Officer at michaela.cheetham@bbts.org.uk. Appeals are dealt with by the Chief Examiner. The process may take several weeks before a response is received.



Fees and Finance

The full cost of the programme is **£891**.

See appendix 2 (points 50 – 54) for full conditions and payment options.

Please note:

- Non-payment/ late payment of course and/or BBTS membership fees will result in your suspension from the programme
- Persistent non-payment of fees may result in your course place being rescinded

Course Fees include

- a personal copy of the following text books:
 - All Blood Counts. Thomas, Thompson and Ridler (1st Edition)
 - Haematology and Immunology. Gargani (4th Edition)
- access to student-only online resources
- the examination fee
- one resit fee (if required)

Additional fees:

- All students must be BBTS members
 - on application
 - throughout the programme (including any deferral period)
 - at examination
- All travel and accommodation expenses associated with the course are the responsibility of the student

Points of Contact

Role	Named Contact	Email Contact	Address/Telephone:
Education Officer	Michaela Cheetham	michaela.cheetham@bbts.org.uk	BBTS Enterprise House Manchester Science Park Lloyd Street North Manchester M15 6SE 0161 232 7999
Chief Examiner	TBC	bbts@bbts.org.uk	
External Examiner*	TBC	bbts@bbts.org.uk	
Programme Director	Bill Chaffe (BBTS President)	bbts@bbts.org.uk	
Academic Advisor (University of Manchester)	Professor Phil Padfield	bbts@bbts.org.uk	

*Please note that it is inappropriate for students/ employers to make direct contact with the External Examiner under any circumstances.

If you are unsure of any of the information provided, or have any other queries, please contact the Education Officer at michaela.cheetham@bbts.org.uk

Appendix 1: Unit Descriptors

Unit 1 - Essential haematology and transfusion (10 credits)

Indicative Content

In this Unit, you will learn about:

- A. Red cell physiology
- B. Haemostasis and platelet physiology
- C. Pathology of anaemia and haematological diseases (*overview*)
- D. Management of blood components in the hospital: *Part 1 (standard routine practices)*
- E. Epidemiology of blood transfusion
- F. Adverse effects of transfusion – *Part 1 (overview)*

Learning Outcomes

You will be expected to:

1. Outline, describe, determine, explain and classify the key features of red cell physiology with respect to the bone marrow, erythropoietin and red cell production, iron composition, function, contents, lifespan, and senescent destruction
2. Describe, explain and classify the vascular system with respect to the arteries, capillaries, veins, lymphatics and cardiac output, distribution of blood volume, flow and blood pressure control
3. Describe, explain and categorise the key features of haemostasis and platelet physiology with respect to platelet production, lifespan, function, use of antiplatelet agents, the coagulation proteins/cascade including use of anticoagulant agents (heparin/ warfarin/ DOACs)
4. Describe, explain and categorise point-of-care viscoelastic tests of coagulation
5. Describe, explain and categorise basic haematology laboratory tests with respect to blood cell counts and blood cell morphology
6. Describe, explain and classify the pathology of anaemia and a range of haematological diseases including haemoglobinopathies and thalassaemias, leukaemias and lymphomas, aplastic anaemia and haemostatic disorders
7. Describe, categorise and explain the management of blood components in the hospital setting with respect to transfusion laboratory storage and their transport and temperature control outside the transfusion laboratory
8. Describe, categorise and explain the administration of different component types, from prescription to completion of the transfusion episode
9. Describe, explain, interpret and predict the epidemiology of blood transfusion with respect to blood use in the UK. Compare and contrast the UK with international practices
10. Determine, explain, classify, demonstrate and predict the adverse effects associated with various aspects of blood transfusion with respect to non-infectious and infectious types; including mechanics, cause, recognition of signs and symptoms. Justify reactive, proactive and preventative measures to avoid known types and emerging infections

Unit 2 – Transfusion Therapy (20 credits)

Indicative Content

In this Unit you will learn about

- A. Transfusion in Surgery and Critical Care
- B. Transfusion in Medical Patients
- C. Obstetric Transfusion
- D. Transfusion in Children
- E. Transfusion in Transplantation Medicine

Learning Outcomes

You will be expected to:

1. Describe, explain, categorise the following with respect to transfusion in surgery, and evaluate and recommend management strategies for
 - a. Pre-operative assessment including anaemia and coagulation problems
 - b. Cell salvage and blood sparing surgery
 - c. Acute bleeding
 - d. Post-operative transfusion thresholds
 - e. Cardiac surgery and bypass
2. Describe, explain, categorise the routine and/ or restrictive use of red cell/ platelets/ plasma with respect to transfusion in critically ill patients. Evaluate and explain transfusion triggers and threshold; recommend management strategies
3. Describe and explain the following with regard to major haemorrhage for a range of different patient groups
 - a. The physiology of shock and trauma induced coagulopathy
 - b. The acute management of major haemorrhage including pharmacological treatments and transfusion management
 - c. The use of near patient testing in major haemorrhage
 - d. Emergency transfusion outside the hospital setting and selection of appropriate blood components
4. Evaluate and recommend transfusion management strategies for a range of inherited haemoglobinopathies.
5. Determine and explain the problems associated with chronic transfusion such as iron overload in haematological diseases
6. Describe, evaluate and recommend strategies for transfusion management of patients with warm and cold autoimmune haemolytic anaemia, autoimmune thrombocytopenic purpura (AITP) bleeding, thrombotic thrombocytopenic purpura (TTP), haemolytic uremic syndrome (HUS), microangiopathic haemolytic anaemia (MAHA)
7. Describe, explain, categorise the use of blood components in cancer (oncology and leukaemia) patients with respect to red cells, platelets, granulocytes. Evaluate specific transfusion triggers/ thresholds and beneficial effects of transfusion. Recommend management strategies including recommendations for resolving transfusion-associated problems/ adverse effects of transfusion and alternatives to transfusion
8. Outline, describe, explain, and categorise anaemias and haematological disease occurring in pregnancy (including HELLP, TTP, and SCD). Describe, evaluate and recommend strategies for their management
9. Determine, describe, explain and investigate the features and cause of, and problems associated with, obstetric massive transfusion, antepartum haemorrhage and postpartum haemorrhage. Outline, explain and evaluate treatment options including use of blood components

10. Outline, describe and explain the causes and effect of haemolytic disease of the fetus/ newborn (HDFN). Describe, evaluate and recommend strategies for clinical management of women with clinically significant red cell antibodies in pregnancy, and of the affected fetus/neonate including intrauterine and exchange transfusion
11. Determine, describe and explain the design, operation and performance of anti-D Ig prophylaxis for the prevention of immune anti-D formation in D negative females
12. Describe, categorise and explain the particular management and administration of blood component transfusion in children including neonatal transfusion and differing stages of prematurity
13. Explain and categorise the principles and practice of transfusion support in haemopoietic stem cell and solid organ transplantation patients including pre-, peri-/ 'during', post-treatment management and guidelines

Unit 3 - Transfusion management and organisational practice (15 credits)

Indicative Content

In this Unit you will learn about:

- A. Adverse effects of transfusion – *Part 2 (clinical management and haemovigilance)*
- B. Management of blood components in the hospital: *Part 2 (specialist/ specific practices/ role of IT)*
- C. Alternatives and adjuncts to transfusion
- D. Therapeutic Apheresis
- E. Quality, regulation and clinical audit with respect to the clinical area
- F. Transfusion Liaison (*the role of the haematology and transfusion laboratories, transfusion practitioner and clinical area/ user interactions and communication*)
- G. Transfusion practices outside the UK

Learning Outcomes

You will be expected to:

1. Determine, classify, explain adverse effects of transfusion in, and discuss the clinical management of, acute and delayed cases of
 - a. ABO and other haemolytic reactions
 - b. Pulmonary problems TACO, TRALI
 - c. Allergic/febrile reactions, IgA deficiency
 - d. Transfusion associated Graft versus host disease
 - e. Infectious complications of transfusion (e.g. bacterial, viral, prion, protozoan)
2. Outline, describe, explain, discuss and evaluate the principles and mechanisms of 'vein to vein' traceability, including requirements for electronic issue, blood tracking systems and remote issue
3. Determine, describe and categorise the design, operation and performance of haemovigilance and reporting schemes in transfusion
4. Determine, describe and categorise the design, operation and performance of blood components management systems in the hospital including appropriate use, waste minimisation and special/ specific requirements
5. Identify, describe, explain, categorise the development and use of alternatives and adjuncts to transfusion including patients who refuse transfusion or where transfusion is not possible
6. Explain, describe and categorise the principles and practice of Therapeutic Apheresis for a range of conditions/ situations
7. Identify, explain and categorise quality and regulation with respect to the clinical area including the principles and practice of clinical audit and various regulatory bodies (e.g. MHRA/ SaBTO/ CQC)
8. Outline, describe, explain, discuss and evaluate the principles and mechanisms of effective Transfusion Liaison protocols/ requirements affecting, and within, the clinical setting

9. Determine, describe and explain provision of non-acute transfusion services outside the hospital setting
10. Determine, describe, compare and categorise the design, operation and performance of transfusion practices outside the UK including the EU and in developing countries

Generic Learning Outcomes

Intellectual skills

1. Critically analyse clinical data
2. Evaluate results commonly encountered in clinical transfusion practice areas
3. Apply knowledge of clinical transfusion to address specific problems

Practical skills

1. Present information clearly in the form of verbal and written reports
2. Communicate complex ideas and arguments in a clear, concise and effective manner

Transferable skills and personal qualities

1. Present complex ideas in simple terms in written format
2. Consistently operate within sphere of personal competence and level of authority
3. Select and apply appropriate analysis or assessment techniques and tools
4. Actively seek accurate and validated information from all available sources
5. Evaluate a wide range of data to assist with judgements and decision making
6. Interpret data and convert into knowledge for use in the clinical context of individual and groups of patients and donors
7. Work in partnership with colleagues, other professionals, donors, patients and their carers to maximise patient/ donor care

Appendix 2: Terms and Conditions for the BBTS Specialist Certificate in Clinical Transfusion Practice

Please read the terms and conditions carefully. If required, additional clarification on any of the rules may be obtained by contacting the BBTS Office.

General

1. The BBTS Specialist Certificate in Clinical Transfusion Practice is overseen by the Professional Affairs and Education Committee (PAEC), who act as the exam board and approve and appoint the Chief Examiner.
2. The BBTS Specialist Certificate in Clinical Transfusion Practice is accredited by the University of Manchester and is equivalent to 45 level 7 points (Credit Accumulation and Transfer Scheme, CATS).
3. The course fees include access to the BBTS virtual learning environment, guided study programme, additional course materials, examination fees and certificate.
4. Applicants must be a member of the BBTS. Membership must be valid at the time of enrolment and continuous for the duration of the course and any re-sit period. **BBTS membership fees are not included in the course fees.**
5. Travel to the exam centre and any associated costs remain the responsibility of the student.
6. The format to the examination / assessment might vary but due notice will be given to applicants of such changes.
7. Applicants are automatically registered for the exam at the point of enrolment. This is non-negotiable.
8. The course begins each November and is of 12 months duration.
9. Due to the nature of the online resources and activities, applicants *must* have access to a reliable internet source.
 - BBTS cannot be held responsible for inability to view online resources due to inconsistent access to the internet.
10. BBTS reserves the right to rescind places/withdraw approved students from the course if fees/membership fees remain unpaid (without prior notification/discussion with the BBTS office) and if there is no response to repeated correspondence.

Eligibility

11. The BBTS Specialist Certificate in Clinical Transfusion Practice is designed for UK Nursing and Midwifery (NMC) registered professionals and Health and Care Professions Council (HCPC) registered Biomedical Scientists (BMS) working in transfusion either in a hospital clinical environment, a hospital transfusion laboratory or blood establishment (blood centre).
12. Republic of Ireland Nursing and Midwifery Board of Ireland (NMBI) registered Nurses/ Midwives and Academy of Medical Laboratory Science (AMLS) registered Medical Scientists are also welcome to apply.
13. Non-registered NHS employees working in transfusion must be working at career grade 5 (or higher) to be eligible. This is typically equivalent to entry-level registration grade.
14. Applications from trainee registrants will not be considered.
15. Applications from overseas scientists working in blood transfusion will be considered on a case-by-case basis but must also meet the minimum eligibility criteria. *Please note that this qualification is based on UK practices and guidelines.*
16. All applicants must:
 - have a BSc in a relevant healthcare science or demonstrable equivalent
 - e.g. candidates with NMC or NMBI/ HCPC or ACSLM registration, but without a BSc, are deemed to have demonstrable equivalence
 - be working at practitioner level (NHS career framework grade 5 equivalent) or higher
 - be working in a transfusion laboratory environment during the programme of study
 - applicants not working in a transfusion environment are not eligible for this programme

- be a member of the BBTS
 - on application
 - throughout the programme (including any deferral period)
 - at examination

And preferably have:

- previous experience of working in a transfusion environment at practitioner level (recommendation: minimum of 6 months)

17. Overseas transfusion scientists are required to submit a statement of practice as part of their application. This must include reasons for applying and a detailed description of transfusion practice experience and duties currently, and previously, undertaken.

- Such applications will be considered by the Chief Examiner who may refer to other members of PAEC for further evaluation.

- **English Language Proficiency for International Applicants**

- Where English is an additional language you must provide the following test certificate(s):
 - International English Language Testing System (IELTS).
 - Minimum Score: 7.0 with no element below 6.5

Or

- Test of English as a Foreign Language (TOEFL iBT)
 - Minimum score: 100/120
- TOEFL test scores undertaken in the United Kingdom are not accepted

All test certificates must be dated within 2 years of the date on which we receive your application

Applying for the Programme

18. Registration for the Specialist Certificate in Clinical Transfusion Practice is through the BBTS website.

19. Enrolment is open for a period of 6 weeks once a year. Specific dates will be announced via the BBTS website.

20. The application form is provided on the BBTS website which will clearly state the eligibility requirements.

21. All applicants are checked against the eligibility criteria for approval.

22. If the applicant meets the criteria, they will be approved though not yet enrolled.

- The applicant is required to pay a deposit of 20% of the full fee during the application process.
- The deposit **must** be made by the individual applicant, regardless of whether their employer will be fully funding the programme. This will be requested by email, once the application has been approved.
- A provisional place will be allocated until a proof of full payment contract is confirmed.
- Once received, the applicant is enrolled onto the course.

23. If the applicant fails to meet the criteria stated in the application form, he/she will not be approved.

24. All applications must be supported by your manager. Manager confirmation will be sought by BBTS.

25. Places on the programme are allocated on a case by case basis, dependent upon fulfilling the enrolment criteria, funding and availability.

Grading, Marking and Results

26. Assessment is a two-part process

- Part 1: Poster (25% weighting)
- Part 2: Written examination (75% weighting)

27. The poster is assessed to the following criteria

- Clinical, audit or educational merit
- Understanding and application of knowledge

- Critical analysis of the subject
- Evidence of appropriate use of relevant literature
- Clear and concise display of relevant information
- Visual appearance

Each criterion is graded out of 5; 1 = poor, 2 = fair, 3 = average, 4 = good, 5 = excellent.

A total of 30 marks is available; this forms 25% of the final grade.

28. The examination papers are weighted as follows:

- Paper A multiple choice questions 25%
- Paper B short answer questions 25%
- Paper C data interpretation and case scenarios 50%
- This total mark then forms 75% of the final grade

29. All examination papers are double-blind marked by two independent examiners to an approved marking scheme and schedule.

30. The two scores are blind collated, reviewed, weighting adjusted and averaged by the chief examiner. Candidates will receive average scores for each paper and an overall average final result.

31. The overall pass mark for this qualification is 60% with a minimum of 40% in each individual assessment.

32. Final grades are awarded as shown in the table:

Final overall percentage score	Grade awarded	Additional information
≥75 %	Distinction	Must achieve a minimum of 60% in each of the papers and the poster
60-74.4 %	Pass	N/A
57.5 – 59.4 %	Borderline	A third independent review is triggered
<57.5	Fail	N/A
N/A	Automatic Fail	<40% in <i>any</i> one written examination paper or poster Failure to submit a poster to the agreed schedule All papers will be marked

33. Where the outcome is a borderline result the exam papers will be reviewed by a third independent marker, appointed by the Chief Examiner. The decision of this third examiner will be final.

34. Candidates will be informed of their results by post within 8-10 weeks following the examination date. Successful candidates will receive their BBTS certificate and university transcripts. *Results will not be available before 8 weeks following the examination date.*

35. A list of successful candidates will be published in the exam report available in the BBTS publication Bloodlines.

Feedback

36. A performance breakdown of each programme cohort will be prepared by the Chief Examiner for the PAEC. This will be published in Bloodlines.

37. Individual written feedback on examination performance can be requested. Feedback requests must be received in writing by the BBTS office within four weeks of the examination results being published (issue date of the candidate result letter). Email is accepted as 'in writing'.

38. Students who have failed their first attempt cannot receive feedback on their examination performance or individual exam questions.

39. Examination papers remain the property of the BBTS and will not be returned to candidates, even if feedback has been requested.

Student participation, deferrals and non-attendees

40. Student participation in online activities will be monitored throughout the programme.
41. Students must complete 75% of the online compulsory discussion activities to be eligible to sit the examination.
 - This is non-negotiable
42. Deferral of the final examination or early withdrawal from the programme may be possible dependent upon extenuating circumstances (see below). You may be able to:
 - Defer your first examination for 6 months (May) or 12 months (November)
 - Your access to the student area will continue (conditional upon active BBTS Membership status)
 - Deferral beyond this time would require you to restart the programme
 - The required compulsory discussion activities must be completed within the original programme schedule
 - Defer your studies to the following cohort
 - This requires you to restart the programme
 - Withdraw from the programme
 - Refund of fees is subject to conditions outlined in the Fees and Finance section

BBTS explanation/ application of extenuating circumstances

Applications for extenuating circumstances must be made at the earliest opportunity and before the date of examination (where possible). Without exception, you will need to complete and submit the BBTS 'Extenuating Circumstances Application Form (ECA1)'. You can request this form from bbts@bbts.org.uk

BBTS defines extenuating circumstances as 'circumstances which are beyond the control of the candidate, which could not reasonably have been foreseen or prevented by the candidate and which would substantially impact on a candidate's performance in assessment'.

The grounds on which extenuating circumstances can be claimed are normally limited to

- a serious illness which would detrimentally affect your performance
 - on the day of the exam
 - in the revision period leading to the exam
 - the death of a close family member or personal friend which would detrimentally affect your performance
 - normally in the period leading up to the date of the examination
 - other serious circumstances beyond your control, which could not have been foreseen or prevented and which would detrimentally affect your performance
43. Evidence is required with independent verification for all claims i.e. a medical note and/ or note from your employer.
 44. Your BBTS membership must be maintained throughout your deferral period i.e. a lapse in membership or non-payment of fees may result in your place being rescinded.
 45. You may **not** claim extenuating circumstances on the basis that your performance has been or will be affected by family, financial or other lifestyle problems other than those listed above.
 - As the Specialist Certificate is a distance learning programme, it is expected that you to plan your work in order that you allow sufficient time to cope with the demands of employment, home life, study workloads and commitments.
 - Extenuating circumstances will **not** normally be granted for any of the following reasons (this list is not exhaustive)
 - Study related circumstances
 - Inadequate planning, organisation or management

- Timetabling of examinations
- Misreading of assessment dates and times
- Personal computer or printer problems
- Difficulty with the English language
- Personal illness or disability where reasonable adjustments are already in place
 - Specific requirements must be highlighted to BBTS at application (if known) or as soon as diagnosed (if new)
 - A disability or long-term medical condition cannot be taken into account after the examination papers have been marked
- Minor illnesses/ injuries e.g.
 - Cold, sore throat, cough
 - Hay fever
 - Sprains (other than in the writing hand /arm)
 - Accidents / illness affecting relatives or friends (unless serious or if the student is the sole carer)
- Normal examination stress or anxiety
- Non serious domestic or personal disruptions
 - Holidays
 - Social occasions (e.g. weddings, christenings, religious celebrations)
 - Moving house
 - Financial difficulties
 - Normal work patterns and pressures of employment
 - Transport problems
 - Change of job
- Pregnancy (unless unexpected complications occur)
 - It is expected that you inform BBTS as soon as possible of your pregnancy and expected date of delivery so reasonable adjustments can be made (where necessary/ possible)

46. Candidates who fail to attend the exam without appropriate notification* and permission from BBTS will not be:

- Eligible for any refund of fees
- Eligible to attend the re-sit examination

*If you experience extenuating circumstances immediately prior to the examination (e.g. the evening before/morning of the examination) it is recognised that you may not be able to contact BBTS office staff until after the examination. Under these conditions it is expected that you contact the BBTS office by telephone at the earliest opportunity. You will be asked to complete and submit the written application for extenuating circumstances as soon as possible.

Appeals and Re-sits

47. All appeals must be made in writing to the BBTS Office within four weeks of the results being published (issue date of the candidate result letter).

- Email is accepted as 'in writing'.
- Details of the reason for the appeal must be given. These will be forwarded to the Chief Examiner, then if necessary, to the Chair of PAEC for resolution.
- Final appeals may be made to the President of the BBTS, or an independent person holding a senior position within the Society (nominated by the President).
- Requests for re-marking of papers will be considered by PAEC and subject to a charge.

- Borderline candidate papers are automatically reviewed by a third marker and are therefore not eligible for this service.
48. Exam papers and scripts will be retained by the BBTS for a period of no longer than 24 months after which they will be disposed of in a secure manner. Digital records of marking scripts will be retained.
49. Candidates who have failed the examination can re-sit once.
- If you fail the examination you will be automatically enrolled for the resit examination in May
 - This is subject to email confirmation of your intention to resit
 - *You may only resit once*
 - There is no fee for this
 - You may defer this *once* to the following November (extenuating circumstances provided)
 - All re-sit results will be capped at 60 (pass mark) which is the maximum mark overall that can be awarded for a resit for this qualification (this applies to the individual papers and final mark)
 - Students who have passed cannot re-sit the exam in an attempt to attain a better mark

Fees and Finance

50. The cost of the programme is £891. This includes the access to learning materials, online resources, examination fee and one potential re-sit fee.
51. You must keep up your BBTS membership for the duration of the programme (including examination)
52. The available finance options are as follows:

Payment Options	Self-funded					Employer-funded		
	20% Deposit	Instalment 1	Instalment 2	Instalment 3	Total payment	20% Deposit [^]	Balance	Total payment
Option 1*	£178.20	£249.48	£249.48	£249.48	£926.64*	£178.20	£712.80	£891
Option 2	£178.20	£712.80	N/A	N/A	£891			
Due Date	31 st July	14 th November	31 st January	30 th April		31 st July	30 th Sept	

* *payment by option 1 is subject to an administration charge*

[^] the deposit must be paid by the applicant; employer-funded applicants must claim the deposit back from their employer

53. The balance instalment(s) is payable by debit/ credit card or cheque by the due dates (shown in the table)
- Non-payment/ late payment of course *and/or BBTS membership fees* will result in suspension from the programme
 - This includes any delayed payment by your employer
 - Online access will be suspended until payment is received
 - Persistent non-payment of any fees may result in your place being rescinded

54. Programme Withdrawal Refund Policy:

- Deposit Payments are non-refundable under all circumstances
 - Refunds are not given to any individual who withdraws from the course from week 23 onwards
- Where extenuating circumstances criteria have been met* the following refund options may be available to you dependent on your payment option:
- *Payment Option 1*
 - Any instalment payments to date (i.e. at the time of withdrawal) will not be refunded.
 - You will not be pursued for any instalments due after your withdrawal date.
 - *Payment Option 2:* The following applies to individuals or employers who have paid the balance in full at the time of withdrawal
 - An individual who withdraws from the course prior to the course start date may receive a refund to the maximum of £712.80
 - Individuals who withdraw from the course in week 1 to week 14 inclusive may receive a refund to a maximum of £475.20
 - Individuals who withdraw from the course in week 15 to week 22 inclusive may receive a refund to a maximum of £237.60

Bribery Act

55. Students who are receiving the Services under this Agreement, shall:

- comply with all applicable laws, statutes, regulations and sanctions relating to anti-bribery and anti-corruption, including but not limited to the Bribery Act 2010 and any guidance provided from time to time;
- comply with any policies and procedures relating to anti-bribery and anti-corruption which are provided;
- not engage in any activity, practice or conduct which would constitute an offence under sections 1,2 or 6 of the Bribery Act 2010 if such activity, practice or conduct had been carried out in the United Kingdom;
- promptly report to the BBTS any request or demand for any undue financial or other advantage of any kind received in connection with the performance of this Agreement.