Monday 3 February 2020
09:00 Registration and coffee
09:30 Course and module introduction
   Objectives, work of the medical gas sub-group and medical gas policy
   Theresa Hughes, Course Director and QC (MGPS) and QA Specialist (NHS) Reading
10:20 Introduction to medical gases and their uses
   Tim Sizer, Regional QA Specialist NHS South West
12:00 Introduction to HTM 02-01 (2006)
   Key principles and its application in practice
   Richard Maycock, Medical Engineering Systems Limited
12:30 Lunch
13:00 Key MGPS features
   Oxygen VIE and PCC
   Medical and surgical air plant
   Vacuum and AGSS plant, Manifolds
   Richard Maycock, Medical Engineering Systems Limited
13:45 Key MGPS features continued
   Valves, LVAs and AVSUs
   Central and local alarms
   Pendants and beams, terminal units and NISTs
   Richard Maycock, Medical Engineering Systems Limited
14:30 Refreshment break
14:45 On-site practical sessions
   3 parallel groups in rotation (30 minute sessions)
   Explanation of how they work and issues relating to them:
   VIE - Richard Maycock
   Medical air compressor - Adrian Fairbrother, QC (MGPS)
   Manifold - Ed Doyle QC (MGPS) Altec (Analytical and Technical) Services Ltd
16:15 Manufacture of medical gases and the role of the QP
   Peter Henrys, BOC Healthcare
17:00 End of day one
19:00 Informal meet and greet drinks in Copthorne hotel bar (optional)

Tuesday 4 February 2020
08:50 Gas safety in relation to MGPS
   Theresa Hughes
09:50 Aspects of MGPS engineering (part 1):
   Configuration of central sources of supply, emergency reserve supplies and mobile emergency backfeed manifolds provision
   Richard Maycock
10:35 Refreshment break
10:50 Aspects of MGPS engineering (part 2):
   Installation requirements of the distribution pipeline, monitoring systems and terminal unit provision
   Richard Maycock
11:50 On-site practical sessions
   2 parallel groups in rotation (30 minute sessions)
   Demonstration of AP tests – Richard Maycock
   Demonstration of pipe jointing – Midland Medical staff
12:50 Lunch
Tuesday 4 February 2020 continued

13:20  Tests that the AP carries out or witnesses. Examples of where tests or observations/PPM have identified problems
  Paul Jones, QC (MGPS) and Consultant (Medical Gases)

14:20  Introduction to the role of QC MGPS
  In relation to HTM 0201
  Theresa Hughes

15:20  Workshop sessions 3 parallel groups in rotation (40 minute sessions)
  Refreshment break to be taken during workshops
  Terminal units function, identity and operational problems
  Andrew Sully, QC (MGPS) Cardiff and Vale NHS Trust
  AVSUs, LVA’s and alarms – operation and faults
  Richard Skidmore, Head of Quality, Barts Health NHS Trust
  Cylinder Management identification, storage, tracking, and connections
  Paul Jones, QC (MGPS) and Consultant (Medical Gases)

17:30  End of day two

19:00  Course dinner – Copthorne hotel

Wednesday 5 February 2020

08:50  Moisture in medical gas systems
  Keith Butler, Alpha Moisture Systems

09:50  Introduction to ‘permit to work’ system and B forms
  Richard Maycock

10:35  Workshop ‘permit to work’ system
  Role-play workshop
  Richard Maycock
  Refreshment break to be taken during workshops

11:45  Introduction to pharmaceutical testing of gases
  How medical gases are tested and how instrumentation does its job
  Adrian Fairbrother

12:20  Lunch

12:50  Workshop sessions 4 parallel groups in rotation (40 minute sessions)
  Refreshment break to be taken during workshops
  Oxygen, identity and purity methods
  Andrew Sully, QC (MGPS) Cardiff and Vale NHS Trust
  Nitrous oxide / Entonox, identity and purity methods
  Richard Skidmore, Head of Quality, Barts Health NHS Trust
  Medical, surgical and dental air, identity and purity methods including moisture, particulates and oil
  Richard Sutherland, QC (MGPS) Omicron Ltd
  Surgical CO₂ and Heliox – uses and ID specialist gases
  Paul Jones, QC (MGPS) and Consultant (Medical Gases)

17:00  End of day three

Thursday 6 February 2020

08:50  The Basic Tool Kit
  Theresa Hughes

09:10  Instrument calibration
  Adrian Fairbrother, QC (MGPS)

09:35  Calibration gases
  Adrian Fairbrother

10:00  Refreshment break

10:15  Calibration of Instruments – demonstration/workshop
  Adrian Fairbrother and Theresa Hughes
Thursday 6 February 2020 continued..
11:00 Common problems that occur with equipment
Richard Sutherland, QC (MGPS) Omicron Ltd
11:45 Measurements of particulates
Paul Jones, QC (MGPS) and Consultant (Medical Gases)
12:30 Lunch
13:00 Problem solving workshop (5 stations)
Workbook
45 minute for test and report writing
*Refreshment break to be taken during workshops*
Testing manifold, Richard Sutherland
Testing a compressor – oil, moisture and CO/CO₂/SO₂, Adrian Fairbrother
Pendant testing, Paul Jones
Mock-up bedhead tests – TU practice, ID and use of Servomex, Theresa Hughes
Terminal unit identity, Tim Sizer
17:00 End of day four

Friday 7 February 2020
08:45 Introduction to day five and welcome (Copthorne Hotel)
Theresa Hughes
QC (MGPS) and QA Specialist (NHS) Reading
09:00 Oxygen conservation
Steve Connew, previously Colchester Hospital University NHS
09:45 Novice QC (MGPS) – pressures of the job
Alistair Ellis-Jones, QC (MGPS) North East Wales NHS Trust
10:30 Refreshment break
10:45 MGPS line pressure
Why is it useful for the QC to know, examples of problems identified, include problems found with vacuum line pressure ID
Richard Sutherland, QC (MGPS) Omicron Ltd
11:45 Introduction to assessment
Tim Sizer and Theresa Hughes
12:00 Written assessment
13:00 Lunch
13:45 Question and answer session
Theresa Hughes, Tim Sizer and team
14:30 Round-up, feedback on assessment test and what happens next
Includes work based practice preparing for registration
Theresa Hughes
15:00 Closing summary, end of day five and course

Please note that, although the organisers remain devoted to the programme specified, they reserve the right to vary the programme in detail if required to do so by factors beyond their control.