**INCOSE Systems Engineering Quality Management Working Group**

**Quality Management Institute (QMI) Professional Development**

**Schedule - Cohort 1 (Feb- Aug 2022)**

**Facilitators:**

Larry Kennedy, PhD, CEO of Quality Management Institute

Barclay Brown, PhD, ESEP, INCOSE CIO, Chair of Systems Engineering Quality Management Working Group

Bill Scheible, ESEP, CISSP, Co-Chair of Systems Engineering Quality Management Working Group

Kim Stansfield, Retired Associate Professor and Principal Teaching Fellow, University of Warwick

Hazel Woodcock, ESEP, Chief Systems Engineer, Costain Group PLC

**Course Infrastructure:**

INCOSE Private Cohort Yammer Community; free account provided

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| **Date** | **Activity** |
| *Independent Learning Activities*  *Time: 30 minutes* | *Getting Started*   * Quality Manager Series Introduction (Video): 6 min * Getting Started -- Larry Kennedy (Video): 3 min * Syllabus for Certified Quality Manager Part 1: QM Leadership Essentials (Reading): 10 min |
| ***Session 1:***  ***16-Feb-2022***  ***2:30-3:30 pm ET*** | *Team Session:*   * *Welcome, Introductions, Expectations* * *Curriculum Overview and Certification Requirements* * *Introduction to Part 1, Module 1: Zero Defects Attitude* * *Q and A* |
| *Independent Learning Activities*  *Time: 6-8 hours* | *Part 1: Creating a High-Performing QM Work Culture*  *Module 1: The Zero Defects Attitude*   * Lesson 1.1 -- Introduction to the Zero Defects Attitude   + Video: 18 min * Lesson 1.2 -- Quality Management and Leadership   + Reading: 4 pages   + Video: 9 min + exam   + Video: 5 min + exam * Lesson 1.3 -- Quality Management Methods   + Reading: 18 pages   + Video: 13 min + exam * Lesson 1.4 -- Quality Management Values   + Reading: 19 pages   + Video: 13 min + exam * Lesson 1.5 -- Quality Management and Reasonable Discussions   + Video: 10 min + exam   + Video: 12 min + exam * Lesson 1.6 -- Quality Management and Profitability   + Reading: 4 pages   + Video: 9 min + exam   + Video: 6 min + exam * Graded Exam |
| ***Session 2:***  ***2-Mar-2022***  ***2:30- 3:30 pm ET*** | *Team Session:*   * *Review of Module 1* * *Q and A with Application* * *Introduction to Part 1, Module 2* |
| *Independent Learning Activities*  *Time: 4-6 hours* | *Part 1: Creating a High-Performing QM Work Culture*  *Module 2: Vocational Certainty*   * Lesson 2.1 -- Introduction to Vocational Certainty   + Video: 25 min * Lesson 2.2 -- Make Sure of Your Calling and Vision (2 parts)   + Reading: 15 pages   + Video: 8 min + exam   + Reading: 22 pages   + Video: 8 min + exam * Lesson 2.3 -- Commitment to Personal Excellence   + Video: 11 min + exam * Lesson 2.4 -- Press Towards Continuous Improvement   + Reading: 19 pages   + Video: 23 min + exam * Lesson 2.5 -- Measure Your Performance Accurately   + Video: 13 min + exam * Graded Exam |
| ***Session 3:***  ***16-Mar-2022***  ***2:30-3:30 pm ET*** | *Team Session:*   * *Review of Module 2* * *Q and A with Application* * *Introduction to Module 6* |
| *Independent Learning Activities*  *Time: 5-6 hours* | *Part 1: Creating a High-Performing QM Work Culture*  *Module 6: Personal Authenticity*   * Lesson 6.1 -- Introduction   + Video: 16 min * Lesson 6.2 -- Embrace the Obligations of Leadership   + Reading: 12 pages   + Video: 24 min + exam * Lesson 6.3 -- Be Diligent to Make Good Decisions (2 parts)   + Video: 24 min + exam   + Video: 11 min + exam   + Video: 5 min + exam * Lesson 6.4 -- Subject Yourself to Reality Checks   + Video: 19 min + exam * Graded Exam |
| ***Session 4:***  ***30-Mar-2022***  ***2:30-3:30 pm ET*** | *Team Session:*   * *Review of Module 6* * *Q and A with Application* * *Introduction to Module 7* |
| *Independent Learning Activities*  *Time: 3-4 hours* | *Part 1 -- Creating a High-Performing QM Work Culture*  *Module 7: Ethical Dependability*   * Lesson 7.1 -- Introduction   + Video: 14 min * Lesson 7.2 -- Communicate with Intellectual Integrity   + Reading: 12 pages   + Video: 20 min + exam * Lesson 7.3 -- Demonstrate Task Faithfulness   + Video: 16 min + exam * Lesson 7.4 -- Acquire a Disciplined and Prudent Life   + Reading: 20 pages   + Video: 11 min + exam * Graded Exam |
| ***Session 5:***  ***13-Apr-2022***  ***2:30-3:30 pm ET*** | *Team Session:*   * *Review of Module 7 & Reflections on Part 1 -- implications for systems engineering profession* * *Q and A with Application* * *Introduction to Part 2: Risk-Based QM and Process Monitoring Competencies* |
| *Independent Learning Activities Time: 5-6 hours* | *Part 2 -- Risk-Based QM and Process Monitoring Competencies*  *Module 3: Process Quality and WPA Introduction (Steps 1 and 2)*     * Lesson 3.1: Introduction   + Video: 17 min * Lesson 3.2 -- Organize Ideas into Work Processes   + Reading: 4 pages   + Reading: 18 pages   + Video: 10 min + exam * Lesson 3.2 -- WPA Step 1   + Reading: 17 pages   + Video: 28 min + exam   + Video: 8 min * Lesson 3.2 -- WPA Step 2   + Video: 21 min + exam * Graded Exam |
| ***Session 6:***  ***27-Apr-2022***  ***2:30-3:30 pm ET*** | *Team Session:*   * *Review of Module 3 -- WPA Steps 1 and 2* * *Q and A with Application* * *Introduction to Module 3: WPA Steps 3 - 5* |
| *Independent Learning Activities Time: 3-4 hours* | *Part 2 -- Risk-Based QM and Process Monitoring Competencies*  *Module 3: Process Quality and WPA Introduction (Steps 3 - 5)*   * Lesson 3.3 -- WPA Step 3   + Video: 27 min + exam   + Video: 8 min + exam * Lesson 3.4 -- WPA Step 4   + Video: 19 min + exam * Lesson 3.5 -- WPA Step 5   + Video 7.5 min + exam * Graded Exam |
| ***Session 7:***  ***11-May- 2022***  ***2:30-3:30 pm ET*** | *Team Session:*   * *Review of Module 3 -- WPA Steps 3 - 5* * *Q and A with Application* * *Review of Project Demonstrating Excellence (PDE) requirements and schedule* * *Introduction to Module 4: Administrative Consistency* |
| *Independent Learning Activities Time: 6-8 hours* | *Part 2 -- Risk-Based QM and Process Monitoring Competencies*  *Module 4: Administrative Consistency*   * Lesson 4.1: Introduction   + Video: 1 min   + Reading: 12 pages   + Reading: 22 pages   + Video: 20 min + exam * Lesson 4.2: Establish Effective Communications   + Video: 20 min + exam * Lesson 4.3: Perform Each Task with Due Diligence   + Video 24 min + exam   + Video: 5 min + exam * Lesson 4.4: Monitor Every Process for Defects   + Video: 20 min + exam   + Video: 12 min + exam * Lesson 4.5: Master the Art of Delegating Responsibility   + Video: 23 min + exam * Lesson 4.6: Managing Time and Information Wisely   + Video: 25 min + exam * Graded Exam |
| ***Session 8:***  ***25-May-2022***  ***2:30-3:30 pm ET*** | *Team Session:*   * *Review of Module 4* * *Q and A with Application* * *Introduction to Module 5: Executive Credibility and Module 8: Creating a QM-KTP Work Culture* |
| *Independent Learning Activities Time: 4-6 hours* | *Part 2 -- Risk-Based QM and Process Monitoring Competencies*  *Module 5: Executive Credibility*   * Lesson 5.1: Introduction   + Video: 1.5 min   + Reading: 12 pages * Lesson 5.2: Hold People Reasonably Accountable   + Video: 15 min + exam * Lesson 5.3: Remain Honorable Under Pressure   + Video: 17 min + exam * Lesson 5.4: Discern and Pursue the Just Cause   + Video: 15 min + exam * Lesson 5.5: Care About People   + Video: 11 min + exam * Graded Exam   *Module 8: Creating a Quality Management - Keeping the Promise Work Culture*   * Lesson 8.1: Introduction   + Video: 1.5 min   + Reading: 5 pages   + Reading: 16 pages * Lesson 8.2: A MAP for Revitalizing Your Work Culture   + Video: 19 min + exam * Graded Exam |
| ***Session 9:***  ***8-Jun-2022***  ***2:30-3:30 pm ET*** | *Team Session*   * *Review of Module 5 and 8* * *Q and A + cohort reflections* * *Project Demonstrating Excellence -- expectations and schedule* * *Sharing your PDE* |
| *Independent Learning Activities Time: 3 months* | Project Demonstrating Excellence   * Work Process Analysis -- independent project work * PDE Instructions found here in course modules: Part 2 -- Risk-Based QM and Process Monitoring Competencies / Admin-Library Course Resources / 4. Graded Project Demonstrating Excellence |

**PDE Development Due Dates**

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| **Date** | **Deliverable** |
| 22-Jun-2022 | Step 1 drafted, including initial high-level full process, errors and KPIs drafted. |
| 6-Jul-2022 | Research for Step 2 complete; process, errors and KPIs refined with relevant team/s and research field notes maintained. |
| 20-Jul-2022 | Costs calculated for Step 3; supporting research documents maintained. |
| 3-Aug-2022 | Course of action determined for Step 4; field notes maintained  Update resume if needed |
| 17-Aug-2022 | Process implemented for Step 5; field notes and supporting documents maintained. |
| 7-Sep-2022 | Executive Summary written  KPIs and errors identified and described  All supporting documents collected into a PDF |
| **PDE DUE**  29-Sep-2022 | All documentation sent to QMI -- including your name and QMI userID -- to [support@QMnation.com](mailto:support@QMnation.com) using the following file names:   * PDE1 ExecSummary-YourLastName-YourFirstName-YourUserID * PDE2 SupportingDocs-YourLastName-YourFirstName-YourUserID * PDE3 CV-Resume-YourLastName-YourFirstName-YourUserID |
|  | Presentations:   * To SEQM Working Group full meeting session |