**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
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| ***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*
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| *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
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| ***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*
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| *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
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| ***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*
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| *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
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| ***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*
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| *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
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| ***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*
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| *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
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| ***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*
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| *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
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| ***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*
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| *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
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| ***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*
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| *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
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| ***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*
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| *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
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**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 maintainedUpdate resume if needed |
| 17-Aug-2022 | Process implemented for Step 5; field notes and supporting documents maintained. |
| 7-Sep-2022 | Executive Summary writtenKPIs and errors identified and describedAll 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 using the following file names:* PDE1 ExecSummary-YourLastName-YourFirstName-YourUserID
* PDE2 SupportingDocs-YourLastName-YourFirstName-YourUserID
* PDE3 CV-Resume-YourLastName-YourFirstName-YourUserID
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|  | Presentations:* To SEQM Working Group full meeting session
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