

## INCOSE Systems Engineering Quality Management Working Group (SEQM) Quality Management Institute (QMI) Professional Development Course and Certification

**Schedule - Cohort 4 (September 2023 – March 2024)**

**Discussion Sessions (optional), Tuesday Afternoons, 3:30pm, US Eastern Time** (schedule subject to change if group agrees)

### 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

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

**TO REGISTER:** Email [barclay.brown@incose.net](mailto:barclay.brown@incose.net) with your name and INCOSE member number.

### Course Infrastructure:

INCOSE Private Cohort Yammer Community; free account provided

Discussion sessions are not recorded and are an optional part of the course. Primary course content is delivered through a self-paced online learning system.

Course is open to current INCOSE members, who are members of the Systems Engineering Quality Management Working Group. New working group members are always welcome.

Date	Activity
<i>Independent Learning Activities</i> Time: 30 minutes	<i>Getting Started</i> <ul style="list-style-type: none"> <li>● Quality Manager Series Introduction (Video): 6 min</li> <li>● Getting Started -- Larry Kennedy (Video): 3 min</li> <li>● Syllabus for Certified Quality Manager Part 1: QM Leadership Essentials (Reading): 10 min</li> </ul>
<b>Session 1:</b> <b>5-September-2023</b> <b>2:30-3:30 pm ET</b>	<i>Team Session:</i> <ul style="list-style-type: none"> <li>● <i>Welcome, Introductions, Expectations</i></li> <li>● <i>Curriculum Overview and Certification Requirements</i></li> <li>● <i>Introduction to Part 1, Module 1: Zero Defects Attitude</i></li> <li>● <i>Q and A</i></li> </ul>
<i>Independent Learning Activities</i> Time: 6-8 hours	<i>Part 1: Creating a High-Performing QM Work Culture</i> <i>Module 1: The Zero Defects Attitude</i> <ul style="list-style-type: none"> <li>● Lesson 1.1 -- Introduction to the Zero Defects Attitude</li> </ul>

	<ul style="list-style-type: none"> <li>○ Video: 18 min</li> <li>● Lesson 1.2 -- Quality Management and Leadership <ul style="list-style-type: none"> <li>○ Reading: 4 pages</li> <li>○ Video: 9 min + exam</li> <li>○ Video: 5 min + exam</li> </ul> </li> <li>● Lesson 1.3 -- Quality Management Methods <ul style="list-style-type: none"> <li>○ Reading: 18 pages</li> <li>○ Video: 13 min + exam</li> </ul> </li> <li>● Lesson 1.4 -- Quality Management Values <ul style="list-style-type: none"> <li>○ Reading: 19 pages</li> <li>○ Video: 13 min + exam</li> </ul> </li> <li>● Lesson 1.5 -- Quality Management and Reasonable Discussions <ul style="list-style-type: none"> <li>○ Video: 10 min + exam</li> <li>○ Video: 12 min + exam</li> </ul> </li> <li>● Lesson 1.6 -- Quality Management and Profitability <ul style="list-style-type: none"> <li>○ Reading: 4 pages</li> <li>○ Video: 9 min + exam</li> <li>○ Video: 6 min + exam</li> </ul> </li> <li>● Graded Exam</li> </ul>
<p><b>Session 2:</b>  <b>19-September-2023</b>  <b>2:30- 3:30 pm ET</b></p>	<p><i>Team Session:</i></p> <ul style="list-style-type: none"> <li>● <i>Review of Module 1</i></li> <li>● <i>Q and A with Application</i></li> <li>● <i>Introduction to Part 1, Module 2</i></li> </ul>
<p><i>Independent Learning Activities</i>  <i>Time: 4-6 hours</i></p>	<p><i>Part 1: Creating a High-Performing QM Work Culture</i>  <i>Module 2: Vocational Certainty</i></p> <ul style="list-style-type: none"> <li>● Lesson 2.1 -- Introduction to Vocational Certainty <ul style="list-style-type: none"> <li>○ Video: 25 min</li> </ul> </li> <li>● Lesson 2.2 -- Make Sure of Your Calling and Vision (2 parts) <ul style="list-style-type: none"> <li>○ Reading: 15 pages</li> <li>○ Video: 8 min + exam</li> <li>○ Reading: 22 pages</li> <li>○ Video: 8 min + exam</li> </ul> </li> <li>● Lesson 2.3 -- Commitment to Personal Excellence <ul style="list-style-type: none"> <li>○ Video: 11 min + exam</li> </ul> </li> <li>● Lesson 2.4 -- Press Towards Continuous Improvement <ul style="list-style-type: none"> <li>○ Reading: 19 pages</li> <li>○ Video: 23 min + exam</li> </ul> </li> <li>● Lesson 2.5 -- Measure Your Performance Accurately <ul style="list-style-type: none"> <li>○ Video: 13 min + exam</li> </ul> </li> <li>● Graded Exam</li> </ul>
<p><b>Session 3:</b>  <b>03-October-2023</b></p>	<p><i>Team Session:</i></p> <ul style="list-style-type: none"> <li>● <i>Review of Module 2</i></li> </ul>

<p><b>2:30-3:30 pm ET</b></p>	<ul style="list-style-type: none"> <li>● <i>Q and A with Application</i></li> <li>● <i>Introduction to Module 6</i></li> </ul>
<p><i>Independent Learning Activities</i> Time: 5-6 hours</p>	<p><i>Part 1: Creating a High-Performing QM Work Culture</i> <i>Module 6: Personal Authenticity</i></p> <ul style="list-style-type: none"> <li>● Lesson 6.1 -- Introduction <ul style="list-style-type: none"> <li>○ Video: 16 min</li> </ul> </li> <li>● Lesson 6.2 -- Embrace the Obligations of Leadership <ul style="list-style-type: none"> <li>○ Reading: 12 pages</li> <li>○ Video: 24 min + exam</li> </ul> </li> <li>● Lesson 6.3 -- Be Diligent to Make Good Decisions (2 parts) <ul style="list-style-type: none"> <li>○ Video: 24 min + exam</li> <li>○ Video: 11 min + exam</li> <li>○ Video: 5 min + exam</li> </ul> </li> <li>● Lesson 6.4 -- Subject Yourself to Reality Checks <ul style="list-style-type: none"> <li>○ Video: 19 min + exam</li> </ul> </li> <li>● Graded Exam</li> </ul>
<p><b>Session 4:</b> <b>17-October-2023</b> <b>2:30-3:30 pm ET</b></p>	<p><i>Team Session:</i></p> <ul style="list-style-type: none"> <li>● <i>Review of Module 6</i></li> <li>● <i>Q and A with Application</i></li> <li>● <i>Introduction to Module 7</i></li> </ul>
<p><i>Independent Learning Activities</i> Time: 3-4 hours</p>	<p><i>Part 1 -- Creating a High-Performing QM Work Culture</i> <i>Module 7: Ethical Dependability</i></p> <ul style="list-style-type: none"> <li>● Lesson 7.1 -- Introduction <ul style="list-style-type: none"> <li>○ Video: 14 min</li> </ul> </li> <li>● Lesson 7.2 -- Communicate with Intellectual Integrity <ul style="list-style-type: none"> <li>○ Reading: 12 pages</li> <li>○ Video: 20 min + exam</li> </ul> </li> <li>● Lesson 7.3 -- Demonstrate Task Faithfulness <ul style="list-style-type: none"> <li>○ Video: 16 min + exam</li> </ul> </li> <li>● Lesson 7.4 -- Acquire a Disciplined and Prudent Life <ul style="list-style-type: none"> <li>○ Reading: 20 pages</li> <li>○ Video: 11 min + exam</li> </ul> </li> <li>● Graded Exam</li> </ul>
<p><b>Session 5:</b> <b>31-October-2023</b> <b>2:30-3:30 pm ET</b></p>	<p><i>Team Session:</i></p> <ul style="list-style-type: none"> <li>● <i>Review of Module 7 &amp; Reflections on Part 1 -- implications for systems engineering profession</i></li> <li>● <i>Q and A with Application</i></li> <li>● <i>Introduction to Part 2: Risk-Based QM and Process Monitoring Competencies</i></li> </ul>
<p><i>Independent</i></p>	<p><i>Part 2 -- Risk-Based QM and Process Monitoring Competencies</i></p>

<p><i>Learning Activities</i> <i>Time: 5-6 hours</i></p>	<p><i>Module 3: Process Quality and WPA Introduction (Steps 1 and 2)</i></p> <ul style="list-style-type: none"> <li>● Lesson 3.1: Introduction <ul style="list-style-type: none"> <li>○ Video: 17 min</li> </ul> </li> <li>● Lesson 3.2 -- Organize Ideas into Work Processes <ul style="list-style-type: none"> <li>○ Reading: 4 pages</li> <li>○ Reading: 18 pages</li> <li>○ Video: 10 min + exam</li> </ul> </li> <li>● Lesson 3.2 -- WPA Step 1 <ul style="list-style-type: none"> <li>○ Reading: 17 pages</li> <li>○ Video: 28 min + exam</li> <li>○ Video: 8 min</li> </ul> </li> <li>● Lesson 3.2 -- WPA Step 2 <ul style="list-style-type: none"> <li>○ Video: 21 min + exam</li> </ul> </li> <li>● Graded Exam</li> </ul>
<p><b>Session 6:</b> <b>14-November-2023</b> <b>2:30-3:30 pm ET</b></p>	<p><i>Team Session:</i></p> <ul style="list-style-type: none"> <li>● <i>Review of Module 3 -- WPA Steps 1 and 2</i></li> <li>● <i>Q and A with Application</i></li> <li>● <i>Introduction to Module 3: WPA Steps 3 - 5</i></li> </ul>
<p><i>Independent Learning Activities</i> <i>Time: 3-4 hours</i></p>	<p><i>Part 2 -- Risk-Based QM and Process Monitoring Competencies</i> <i>Module 3: Process Quality and WPA Introduction (Steps 3 - 5)</i></p> <ul style="list-style-type: none"> <li>● Lesson 3.3 -- WPA Step 3 <ul style="list-style-type: none"> <li>○ Video: 27 min + exam</li> <li>○ Video: 8 min + exam</li> </ul> </li> <li>● Lesson 3.4 -- WPA Step 4 <ul style="list-style-type: none"> <li>○ Video: 19 min + exam</li> </ul> </li> <li>● Lesson 3.5 -- WPA Step 5 <ul style="list-style-type: none"> <li>○ Video 7.5 min + exam</li> </ul> </li> <li>● Graded Exam</li> </ul>
<p><b>Session 7:</b> <b>28-November-2023</b> <b>2:30-3:30 pm ET</b></p>	<p><i>Team Session:</i></p> <ul style="list-style-type: none"> <li>● <i>Review of Module 3 -- WPA Steps 3 - 5</i></li> <li>● <i>Q and A with Application</i></li> <li>● <i>Review of Project Demonstrating Excellence (PDE) requirements and schedule</i></li> <li>● <i>Introduction to Module 4: Administrative Consistency</i></li> </ul>
<p><i>Independent Learning Activities</i> <i>Time: 6-8 hours</i></p>	<p><i>Part 2 -- Risk-Based QM and Process Monitoring Competencies</i> <i>Module 4: Administrative Consistency</i></p> <ul style="list-style-type: none"> <li>● Lesson 4.1: Introduction <ul style="list-style-type: none"> <li>○ Video: 1 min</li> <li>○ Reading: 12 pages</li> <li>○ Reading: 22 pages</li> <li>○ Video: 20 min + exam</li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>● Lesson 4.2: Establish Effective Communications <ul style="list-style-type: none"> <li>○ Video: 20 min + exam</li> </ul> </li> <li>● Lesson 4.3: Perform Each Task with Due Diligence <ul style="list-style-type: none"> <li>○ Video 24 min + exam</li> <li>○ Video: 5 min + exam</li> </ul> </li> <li>● Lesson 4.4: Monitor Every Process for Defects <ul style="list-style-type: none"> <li>○ Video: 20 min + exam</li> <li>○ Video: 12 min + exam</li> </ul> </li> <li>● Lesson 4.5: Master the Art of Delegating Responsibility <ul style="list-style-type: none"> <li>○ Video: 23 min + exam</li> </ul> </li> <li>● Lesson 4.6: Managing Time and Information Wisely <ul style="list-style-type: none"> <li>○ Video: 25 min + exam</li> </ul> </li> <li>● Graded Exam</li> </ul>
<p><b>Session 8:</b>  <b>12-December-2023</b>  <b>2:30-3:30 pm ET</b></p>	<p><i>Team Session:</i></p> <ul style="list-style-type: none"> <li>● <i>Review of Module 4</i></li> <li>● <i>Q and A with Application</i></li> <li>● <i>Introduction to Module 5: Executive Credibility and Module 8: Creating a QM-KTP Work Culture</i></li> </ul>
<p><i>Independent Learning Activities</i>  <i>Time: 4-6 hours</i></p>	<p><i>Part 2 -- Risk-Based QM and Process Monitoring Competencies</i>  <i>Module 5: Executive Credibility</i></p> <ul style="list-style-type: none"> <li>● Lesson 5.1: Introduction <ul style="list-style-type: none"> <li>○ Video: 1.5 min</li> <li>○ Reading: 12 pages</li> </ul> </li> <li>● Lesson 5.2: Hold People Reasonably Accountable <ul style="list-style-type: none"> <li>○ Video: 15 min + exam</li> </ul> </li> <li>● Lesson 5.3: Remain Honorable Under Pressure <ul style="list-style-type: none"> <li>○ Video: 17 min + exam</li> </ul> </li> <li>● Lesson 5.4: Discern and Pursue the Just Cause <ul style="list-style-type: none"> <li>○ Video: 15 min + exam</li> </ul> </li> <li>● Lesson 5.5: Care About People <ul style="list-style-type: none"> <li>○ Video: 11 min + exam</li> </ul> </li> <li>● Graded Exam</li> </ul> <p><i>Module 8: Creating a Quality Management - Keeping the Promise Work Culture</i></p> <ul style="list-style-type: none"> <li>● Lesson 8.1: Introduction <ul style="list-style-type: none"> <li>○ Video: 1.5 min</li> <li>○ Reading: 5 pages</li> <li>○ Reading: 16 pages</li> </ul> </li> <li>● Lesson 8.2: A MAP for Revitalizing Your Work Culture <ul style="list-style-type: none"> <li>○ Video: 19 min + exam</li> </ul> </li> <li>● Graded Exam</li> </ul>

<p><b>Session 9:</b>  <b>09-January-2024</b>  <b>2:30-3:30 pm ET</b></p>	<p><i>Team Session</i></p> <ul style="list-style-type: none"> <li>● <i>Review of Module 5 and 8</i></li> <li>● <i>Q and A + cohort reflections</i></li> <li>● <i>Project Demonstrating Excellence -- expectations and schedule</i></li> <li>● <i>Sharing your PDE</i></li> </ul>
<p><i>Independent Learning Activities</i>  <i>Time: 3 months</i></p>	<p>Project Demonstrating Excellence</p> <ul style="list-style-type: none"> <li>● Work Process Analysis -- independent project work</li> <li>● 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</li> </ul>

### PDE Development Due Dates

Date	Deliverable
23-Jan-2024	Step 1 drafted, including initial high-level full process, errors and KPIs drafted.
06-Feb-2024	Research for Step 2 complete; process, errors and KPIs refined with relevant team/s and research field notes maintained.
20-Feb-2024	Costs calculated for Step 3; supporting research documents maintained.
05-Mar-2024	Course of action determined for Step 4; field notes maintained Update resume if needed
19-Mar-2024	Process implemented for Step 5; field notes and supporting documents maintained.
02-Apr-2024	Executive Summary written KPIs and errors identified and described All supporting documents collected into a PDF
<p><b>PDE DUE</b>  16-Apr-2024</p>	<p>All documentation sent to QMI -- including your name and QMI userID -- to <a href="mailto:support@QMnation.com">support@QMnation.com</a> using the following file names:</p> <ul style="list-style-type: none"> <li>● PDE1 ExecSummary-YourLastName-YourFirstName-YourUserID</li> <li>● PDE2 SupportingDocs-YourLastName-YourFirstName-YourUserID</li> <li>● PDE3 CV-Resume-YourLastName-YourFirstName-YourUserID</li> </ul>
	<p>Presentations:</p> <ul style="list-style-type: none"> <li>● To SEQM Working Group full meeting session</li> </ul>