

# Implementing and Managing In-House Radiology Maintenance Programs

Course Length: 1 Week  
CEU's Awarded: 4

<p><b>COURSE INTRODUCTION</b> The benefits of in-house radiology maintenance programs include cost savings, enhanced image quality, reduced patient and operator radiation dose, and improved equipment uptime. The in-house manager must possess the special skills and knowledge required to implement and manage the capital equipment throughout its life cycle from purchasing through replacement.</p>	<p><b>COURSE OBJECTIVES</b> At the conclusion of this course, attendees will be able to:</p> <ul style="list-style-type: none"> <li>● Perform a cost benefit analysis of their specific needs.</li> <li>● Write bid specifications and evaluate received bids.</li> <li>● Prepare an equipment maintenance budget.</li> <li>● Analyze service alternatives.</li> <li>● Prepare a staffing and training plan.</li> </ul>	<p><b>WHO SHOULD ATTEND</b></p> <ul style="list-style-type: none"> <li>● Radiology Administrators</li> <li>● Hospital Administrators</li> <li>● Clinical Engineering Managers</li> <li>● Biomedical Engineering Managers</li> </ul> <p>● Those desiring to analyze the effectiveness of their in-house program</p>
<p><b>DAY 1</b></p> <p>I. Overview of Capital Asset Management</p> <ol style="list-style-type: none"> <li>A. Bid specifications</li> <li>B. Equipment selection process</li> <li>C. Maintenance budget process</li> <li>D. Evaluating maintenance options</li> <li>E. Equipment history</li> <li>F. Cost/benefit analysis</li> </ol> <p>II. Overview of the Circle of Quality Assurance in Radiology</p> <ol style="list-style-type: none"> <li>A. Acceptance testing</li> <li>B. Performance evaluation</li> <li>C. Compliance testing</li> <li>D. Image quality assurance</li> <li>E. Preventive maintenance</li> <li>F. Service programs</li> <li>G. Continuing education</li> </ol>	<p><b>DAY 2</b></p> <p>I. The in-house radiology maintenance program</p> <ol style="list-style-type: none"> <li>A. Components             <ol style="list-style-type: none"> <li>1. Preventive maintenance</li> <li>2. Performance evaluations</li> <li>3. Repair programs</li> <li>4. Equipment tracking</li> <li>5. Training</li> </ol> </li> <li>B. Implementation process</li> <li>C. Projections of costs</li> <li>D. Responsibilities</li> <li>E. Structure of program</li> <li>F. Staffing</li> <li>G. Tools and test equipment</li> <li>H. Training</li> </ol> <p><b>DAY 3</b></p> <p>I. Cost/benefit analysis of radiology maintenance in-house</p> <ol style="list-style-type: none"> <li>A. Maintenance alternatives             <ol style="list-style-type: none"> <li>1. Insurance</li> <li>2. OEM</li> <li>3. ISO</li> <li>4. Management groups</li> <li>5. Shared service</li> </ol> </li> <li>B. Cost projections/comparisons</li> <li>C. Contracts             <ol style="list-style-type: none"> <li>1. Analysis of types</li> <li>2. How to write/evaluate</li> </ol> </li> </ol>	<p><b>DAY 4</b></p> <p>I. Developing the business/action plan Hands-on exercise</p> <ol style="list-style-type: none"> <li>A. Needs analysis</li> <li>B. Task analysis</li> <li>C. Personnel responsibilities             <ol style="list-style-type: none"> <li>1. Organizational chart</li> <li>2. Job descriptions</li> <li>3. Salary organization</li> <li>4. Selection process</li> </ol> </li> <li>D. Plan evaluation process</li> </ol> <p><b>DAY 5</b></p> <p>I. Proposal development</p> <ol style="list-style-type: none"> <li>A. Presentation             <ol style="list-style-type: none"> <li>1. Providing ownership</li> <li>2. Gaining acceptance</li> <li>3. Objection handling</li> </ol> </li> <li>B. Program implementation             <ol style="list-style-type: none"> <li>1. Where to start</li> <li>2. How to start</li> <li>3. When to start</li> </ol> </li> <li>C. Evaluation process</li> </ol> <p>II. Course review</p> <p>III. Course evaluation</p> <p>IV. Course critique</p>