## Fundamentals of 12-Lead ECG Acquisition and STEMI Recognition for Emergency Responders Syllabus

Time Frame	2-3 hours, with additional time allocated for hands-on practice in small groups. Includes 1 hour of lecture, 1 hour of hands-on practice, and 30 minutes to 1 hour of assessments and Q&A sessions.
Audience	Primarily designed for BLS providers, this course also includes a module tailored for ALS providers to foster interdisciplinary collaboration.
Synopsis	This course integrates practical skills with real-world applications, offering emergency responders the knowledge to accurately acquire 12/15 lead ECGs and identify STEMI, significantly improving patient outcomes. Through interactive case studies and evidence-based practices, participants will learn the critical role of early diagnosis in the chain of survival.
Overall Objective	To equip healthcare providers with the necessary skills for effective 12/15 lead ECG acquisition and STEMI identification, emphasizing the direct impact on patient survival rates and highlighting the importance of swift, coordinated care delivery.
Objectives	<ul> <li>By the end of the session the student will be able to: <ol> <li>Describe the process of coronary artery occlusion that leads to a myocardial infarction. (What)</li> <li>Describe common signs and symptoms and risk factors for AMI. (Who)</li> <li>Describe the value of early 12/15 lead ECG acquisition as it relates to the 3 Keys to quality STEMI systems of care. (Recognition, Activation, Intervention) (Why)</li> <li>Describe or demonstrate proper site preparation, lead placement location and validation of a 12/15 lead ECG. (How)</li> <li>Give a 12/15 lead ECG and using a simple algorithm, recognize ECG evidence of STEMI. (recognition)</li> <li>Identify and correct common artifacts and errors in ECGs, enhancing accuracy in readings and troubleshooting skills.</li> </ol> </li> </ul>
Core Skills	<ul> <li>Proper Skin Preparation</li> <li>Correct Lead Placement for a <i>diagnostic</i> 12 Lead</li> <li>Validation Technique</li> <li>Individual machine competency (Local area)</li> <li>STEMI / No STEMI recognition</li> <li>Effective Communication with Receiving Facilities</li> <li>Best Practices in ECG Documentation and facilitating seamless patient handovers.</li> </ul>
Methodology	The course methodology is enriched with interactive case studies, simulations, and practical exercises, alongside traditional lectures and multimedia presentations, to ensure a comprehensive learning experience.





