

# Medical Device Development Immersion Course Agenda

**Medical Device Development Immersion** is a two-day course examining all aspects of medical device development in detail. Starting with the changing regulatory environment, different regulatory pathways are reviewed, and a comparison of FDA vs. EU approval process is made. The five phases of medical device development, market opportunity, evaluation, design, verification, and manufacturing, are described in detail. Take this course to develop an understanding of the entire process required to bring a new medical device to market.

## Five takeaways:

1. An improved ability to communicate with engineers, colleagues and manufacturers
2. Medical device terminology and processes
3. A toolbox to help design a medical device prototype
4. Knowledge of the various approval pathways for each medical device class
5. Risk mitigation in medical device development and approval

## Course Agenda

### Day One

#### **Medical Device Overview** 9:00-10:30

Medical device defined  
Medical device diversity  
Industry sectors and top companies  
History of device regulation  
FDA approval pathways: 501(K), PMA

#### **Break** 10:30-10:45

#### **Medical Device Regulations** 10:45-12:00

Quality system regulations (QSRs)  
Current good manufacturing practices  
Good laboratory practices  
Good clinical practices  
Risk management plan  
Exemptions  
Rest of world approval pathways

Special categories: home brew and combinations

#### **Lunch** 12:00-1:00

#### **Medical Device Regulations continued** 1:00-2:00

Regulatory challenges  
Diagnostics  
Predicates and new technologies  
Clinical trials  
Medical device reporting

#### **Medical Device Development** 2:00-4:15

Phase I: market opportunity  
Market analysis  
Risk management plan  
Phase II: concept evaluation  
-Formulation steps  
-Feasibility

## **Medical Device Development continued**

2:00-4:15

Phase III: engineering design process

- Design
- Development
- Prototyping

**Q&A | Review** 4:15-4:30

## **Day Two**

**Review** 9:00-9:30

## **Medical Device Development 9:30-11:00**

Phase IV: Verification

Phase V: Manufacturing Transfer

- Documentation
- Equipment IQ/OQ/PQ
- Biocompatibility
- Sterilization
- Shipping and storage

**Break** 11:00-11:15

## **Medical Device Approval 11:15-1:00**

Clinical trials

Need for a gold standard

Regulatory submissions

Business preparations

Product launch preparations

Coding and reimbursement

**Lunch** 1:00-2:00

## **Commercialization 2:00-3:15**

Manufacturing scale-up

Product launch

Post-launch assessment

**Break** 3:00-3:15

## **Current Issues 3:15-4:15**

The increasing role of the FDA

Why are the newest devices in Europe?

**Q&A/Review** 4:15-4:30