



Certified Robotics Systems Professional (CRSP)

Exam Objectives CRSP-001

About the exam

Item	Detail
Level	Beginner
Number of questions	60. A performance-based exam: each form can carry up to 5 to 12 performance-based questions alongside the multiple-choice questions.
Delivery model	Computer adaptive in 3 stages of 22, 19, 19 questions. Your score on each stage selects the difficulty of the next, so no two candidates sit the same paper.
Time limit	90 minutes
Scoring	You need a score of 700 out of 900 to pass. Results are reported on a scale of 100 to 900, and 700 corresponds to answering 72% of the exam correctly. Harder questions carry more weight, so a score means the same thing on any route. Multiple-response items and PBQs are scored all or nothing.
Delivery	Online, fully proctored (webcam, microphone and screen).
Prerequisites	No formal prerequisite. Candidates do best with some hands-on exposure to robotics or automation and 20 to 40 hours of study.
Retakes	No waiting period after a failed first attempt. Candidates pay the exam price each time they attempt the exam. See the CertLabz Certification Retake Policy at certlabz.com/certification-retake-policy.html
Validity	3 years. Renew with 35 CEUs per cycle and the \$25 annual continuing-education fee, or by passing the current exam.
Language	English
Exam voucher	\$99 for one sitting, valid 12 months. Bundles add the study guide ebook and the All Access plan.

Domain weights

Domain	Questions
D1 Robotics Foundations (16%)	10

D2 Sensors and Actuators (16%)

	10
D3 Kinematics and Motion (17%)	10
D4 Control Systems (17%)	10
D5 Programming and Integration (17%)	10
D6 Safety, Testing and Operations (17%)	10
Total (100%)	60

Objectives by domain

Each objective may appear as knowledge, a scenario to judge, a circuit to trace or assemble, or a number to compute. Each form can carry up to 5 to 12 performance-based questions: drag-and-drop matching, sequencing and table completion, drawn fresh each attempt. The exam does not test any vendor's SDK syntax.

D1 Robotics Foundations

16% 10 questions

- D1.1 What a robot is
- D1.2 Robot types
- D1.3 Components overview
- D1.4 Degrees of freedom
- D1.5 Coordinate frames
- D1.6 Key terms

D2 Sensors and Actuators

16% 10 questions

- D2.1 Encoders
- D2.2 Proximity and vision sensors
- D2.3 Force and torque
- D2.4 Motors and drives
- D2.5 Grippers and end effectors
- D2.6 Feedback signals

D3 Kinematics and Motion

17% 10 questions

- D3.1 Forward kinematics
- D3.2 Inverse kinematics
- D3.3 Joints and links
- D3.4 Workspace
- D3.5 Trajectories
- D3.6 Speed and acceleration

D4 Control Systems

17% 10 questions

- D4.1 Open and closed loop
- D4.2 PID control
- D4.3 Feedback and error
- D4.4 Stability basics
- D4.5 Motion controllers
- D4.6 Tuning

D5 Programming and Integration

17% 10 questions

- D5.1 Robot programming basics
- D5.2 Teach pendant
- D5.3 I/O and signals
- D5.4 Communication buses
- D5.5 Simulation
- D5.6 Integration with PLCs

D6 Safety, Testing and Operations

17% 10 questions

- D6.1 Risk assessment
- D6.2 Safeguarding
- D6.3 Emergency stops
- D6.4 Standards
- D6.5 Testing and commissioning
- D6.6 Maintenance

Continuing education

Renewal	Requirement
Validity	3 years from the date of issue
CEUs required per cycle	35
Annual CE fee	\$25
Alternative to CEUs	Pass the current version of the exam before the expiry date

Qualifying activities

Activity	CEUs
CertLabz labs, PBQs, courses and SkillTracker assessments	1 CEU per hour, up to 25 per cycle
Other industry certifications earned or renewed	10 to 25 each, depending on level
Conferences, webinars and training	1 CEU per hour, up to 20 per cycle
Robotics, automation or controls work experience	3 per year, up to 9 per cycle
Teaching, mentoring, publishing or community contributions	Up to 15 per cycle
College courses in engineering or computing	10 per completed course

CertLabz Certification Retake Policy

- **No waiting period after a failed first attempt:** If you fail your first attempt at any CertLabz certification examination, CertLabz does not require any waiting period between the first and second attempt.
- **Once you pass, you cannot resit the same exam code:** A candidate who has passed an exam and achieved a certification cannot take that exam again under the same exam code without prior consent from CertLabz. You will need to wait until a new series of the exam is published before attempting to recertify by examination.
- **Beta examinations, one attempt only:** A CertLabz beta examination may be taken one time by each candidate.
- **Violations invalidate the attempt:** A test found to be in violation of this policy will be invalidated, and the candidate may be subject to a suspension period. Repeat violators will be permanently banned from the CertLabz Certification Program.
- **Every attempt is paid for:** Candidates must pay the exam price each time they attempt the exam. CertLabz does not offer free retests or discounts on retakes.

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<https://certlabz.com/certifications/certified-robotics-systems-professional.html>