



Certified Machine Learning Professional (CMLP)

Exam Objectives CMLP-001

About the exam

Item	Detail
Level	Intermediate
Number of questions	80. 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 28, 26, 26 questions. Your score on each stage selects the difficulty of the next, so no two candidates sit the same paper.
Time limit	120 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 one to two years of data, analytics or software experience and 50 to 80 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 50 CEUs per cycle and the \$35 annual continuing-education fee, or by passing the current exam.
Language	English
Exam voucher	\$149 for one sitting, valid 12 months. Bundles add the study guide ebook and the All Access plan.

Domain weights

Domain	Questions
D1 ML Foundations and Problem Framing (16%)	13

D2 Data Preparation and Feature Engineering (16%)

	13
D3 Algorithms and Model Selection (17%)	14
D4 Training, Tuning and Evaluation (17%)	14
D5 Deployment and Monitoring (17%)	13
D6 Responsible ML and Practice (17%)	13
Total (100%)	80

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 ML Foundations and Problem Framing

16% 13 questions

- D1.1 Supervised, unsupervised, reinforcement learning
- D1.2 Classification versus regression
- D1.3 Framing the objective and target
- D1.4 When ML is and is not the right tool
- D1.5 Baselines and metric choice
- D1.6 Training versus inference

D2 Data Preparation and Feature Engineering

16% 13 questions

- D2.1 Cleaning and missing values
- D2.2 Encoding categoricals and scaling
- D2.3 Feature engineering and selection
- D2.4 Data leakage and fit-on-train-only
- D2.5 Class balance and augmentation
- D2.6 Reproducible preparation

D3 Algorithms and Model Selection

17% 14 questions

- D3.1 Linear models, trees and ensembles
- D3.2 Neural networks and when to use them
- D3.3 The bias-variance trade-off
- D3.4 Overfitting, underfitting and regularization
- D3.5 Interpretability in selection
- D3.6 Fair, consistent model comparison

D4 Training, Tuning and Evaluation

17% 14 questions

- D4.1 Train/validation/test splits
- D4.2 Cross-validation
- D4.3 Hyperparameter tuning
- D4.4 Classification and regression metrics
- D4.5 Thresholds and the cost of errors
- D4.6 Early stopping and honest reporting

D5 Deployment and Monitoring

17% 13 questions

- D5.1 Serving and feature consistency
- D5.2 Model drift and monitoring
- D5.3 Gradual rollout and rollback
- D5.4 A/B testing and real impact
- D5.5 Latency, cost and ground truth
- D5.6 Retraining strategy

D6 Responsible ML and Practice

17% 13 questions

- D6.1 Fairness and biased data
- D6.2 Proxies and outcome testing
- D6.3 Interpretability and accountability
- D6.4 Reproducibility
- D6.5 Privacy and lawful use of data
- D6.6 Human oversight and honest claims

Continuing education

Renewal	Requirement
Validity	3 years from the date of issue
CEUs required per cycle	50
Annual CE fee	\$35
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
Machine learning, data science or software work experience	3 per year, up to 9 per cycle
Teaching, mentoring, publishing or open-source contributions	Up to 15 per cycle
College courses in computing, statistics or mathematics	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-machine-learning-professional.html>