



**Leadership, Education & Advancement Program**  
and Certified Smart Card Industry Professional



Smart Card  
Alliance

*The Knowledge Edge*

# THE LEADERSHIP, EDUCATION & ADVANCEMENT PROGRAM (LEAP)

*Setting the standard for knowledge and expertise in the smart card industry*



As the leading professional association of the global smart card industry, the Smart Card Alliance has created the Leadership, Education and

Advancement Program to:

- Advance education and professional development for individuals working in the smart card industry.
- Manage and confer, based on a standardized body-of-knowledge examination, the Certified Smart Card Industry Professional (CSCIP) designation.

LEAP membership is open to all full-time professionals working in the global smart card industry regardless of whether their organization is a current member of the Smart Card Alliance.

## **LEAP AT THE OPPORTUNITY:**

### ***Professional development enhances professional excellence***

LEAP is designed for individuals interested in continuously improving their professional proficiency in the smart card industry through:

- A comprehensive online library of educational materials
- Seminars and conferences
- Training resources
- Professional networking
- Certified Smart Card Industry Professional (CSCIP) designation

LEAP participants may or may not choose to seek professional CSCIP certification.

Smart Card Alliance membership is not a requirement of LEAP. Smart Card Alliance members are recognized through a discounted annual LEAP membership fee. LEAP members have the option of joining the Smart Card Alliance as an individual (Associate Level) member or one of several organizational member levels to gain additional benefits.

### ***LEAP professional, employer and industry benefits***

LEAP provides significant value to the smart card industry and the global smart card marketplace:

- Advances the industry by training and recognizing industry professionals with enhanced levels of knowledge and experience.
- Provides individuals with educational resources and professional networking opportunities to further their careers.
- Reinforces technology standards, quality and smart card security approaches with a professional commitment to competence and performance.
- Furthers a company's overall business goals by ensuring that customers will interact with skilled professionals knowledgeable about the smart card industry and a company's products and services.
- Demonstrates an individual's commitment to the smart card industry and to life-long learning through continuing education or CSCIP recertification.
- Provides those who achieve CSCIP certification with a sense of pride, professional accomplishment and greater opportunities.



## **CERTIFIED SMART CARD INDUSTRY PROFESSIONAL (CSCIP)**



Those LEAP members who wish to achieve certification as experts in smart card technology may do so at any time. Certification requires that LEAP members meet specific educational and professional criteria prior to acceptance into the certification program.

A series of educational modules forming the CSCIP certification body of knowledge has been developed by leading smart card industry professionals and is updated regularly. These educational modules prepare certification applicants for the multi-part CSCIP exam administered by the Smart Card Alliance.

The exam requires demonstrated proficiency in a broad body of industry knowledge (see back cover), as opposed to expertise in specialized smart card disciplines. Applicants must receive a passing grade on all parts of the exam to receive the CSCIP certification.

LEAP membership in good standing is required to sustain the certification, and documentation of a required level of continuing education activities must be submitted every three years for CSCIP re-certification.

### ***Join the proud***

Those who achieve certification may use the CSCIP designation after their names on their business cards, biographies and stationery. They receive a plaque and a lapel pin and have access to certificant-only programs, a professional networking site and other services.

### ***Powering the industry's future***

LEAP advances the smart card industry and its professionals by providing in-depth industry education and professional certification for documenting proficiency and knowledge of smart card products and technologies. For detailed information visit [www.smartcardalliance.org](http://www.smartcardalliance.org).

### **CSCIP: What's in it for you?**

- ✓ *Demonstrates your proficiency and knowledge*
- ✓ *Showcases your professionalism*
- ✓ *Gives you personal satisfaction of achievement*
- ✓ *Distinguishes you with clients*
- ✓ *Increases your recognition within the industry*
- ✓ *Prepares you for professional challenges*
- ✓ *Demonstrates your ability to add value*





**OVERVIEW:  
THE CSCIP BODY OF KNOWLEDGE**

The CSCIP certification body of knowledge incorporates a thorough examination of the terminology, relevant standards and business aspects of smart card technology and related applications, systems interfaces, personalization and management systems that are used in the payment, transit, mobile, identity, access control and digital security markets.

**Smart Card Fundamentals**

- Basic smart card components, structure, functions
- IC types (memory, protected memory, microcontroller, RF)
- Card design and card body
- Formats (card, USB token, SIM, embedded, other)
- Communications interface (contact, contactless, dual interface)
- Memory size and types
- Operating systems (native, Java, Multos, other)
- Smart card system design features:
  - Manufacturing process
  - Readers (POS, PC, access control)
  - Relevant smart card standards (ISO, ANSI)
  - Smart cards and biometrics
  - Specifications
  - Glossary of terms

**Security**

- Certifications (FIPS, Common Criteria)
- IC level (anti-tampering, masking)
- Card edge interface
- Encryption algorithms
- Security at system level
  - Physical
  - Logical

**Smart Card Application and Data Management**

- Single application cards
- Multi-application cards
- Chip initialization
- Key management (symmetric, asymmetric)
- Issuance
- Card life cycle management
- Relevant standards

**Smart Card Usage Models:**

**Identity and Security**

- Smart card drivers and benefits
- Identity cards and tokens
- ePassports
- Physical/logical access
- Smart cards and biometrics
- Smart cards and digital certificates
- Sample smart card identity and security models
- Relevant standards
- Identity and security application examples
- Privacy

**Smart Card Usage Models:**

**Payments and Financial Transactions**

- Smart card drivers and benefits
- Bank cards (credit, debit, pre-paid, ATM)
- EMV, chip and PIN, proprietary (contact-based)
- Contactless (EMV, non-EMV)
- ePurse, stored value cards (open and closed loop)
- Transportation and parking
- Online banking/retail ecommerce
- Loyalty
- Sample smart card payment models
- Relevant standards

**Smart Card Usage Models:**

**Mobile, SIM and Near Field Communication (NFC)**

- Smart card drivers and benefits
- SIMs
- USIMs
- NFC
- Smart media
- Pay TV
- Sample smart card mobile and subscriber models



**Smart Card Alliance**

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