

# smart campus scheme

**Fortress GB's unique Smart Campus Scheme combines applications such as: registration, time attendance, library, distance learning and access control together with an e- Purse on one contactless smart card.**

## The Concept



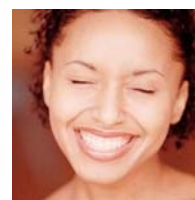
The Smart Campus Scheme enables universities to operate as profitable businesses, increasing operational efficiency while maintaining high-level of security. Working closely with universities for the past five years, Fortress GB has developed versatile smart card solutions, tailored to meet universities core needs.

The advanced Smart Campus Scheme interfaces and supports a university's existing technologies, integrating seamlessly with existing systems and databases. The Smart Campus Scheme is reliable, flexible and scalable and it can be self-managed by the university.



The Smart Campus Scheme offers users the opportunity to streamline processes such as pre-registration, registration and time attendance. Additionally, it provides students with remote learning capabilities, e-Purse features and user friendliness.

Fortress GB understands that universities operate in a different ways, and therefore customises the Smart Campus Scheme so it would meet each university's individual requirement.



## Advantages of the Smart Campus Scheme

### One-stop-shop

A unique solution is tailor-made for each university, integrating as many applications as the university wishes from Fortress GB's complete range.

We will take care of all aspects of integration into the University infrastructure, and will provide training and technical support.

### Various financing models

With a unique financing programme, all universities can now afford to implement the full scale Scheme, without having to settle for fewer applications or functionalities.



### Self-Management

The Smart Campus Scheme can be easily operated and managed by the university itself. With Fortress Issuing Station Universities can run their own in house bureaus, enjoying maximum flexibility in issuing new cards as well as saving time and savings made by not having to use third party bureau services.

### Integration with existing systems

Using its proprietary innovative *Universal Integration Engine*, Fortress GB can seamlessly integrate the Smart Campus system to all university's existing systems, databases and infrastructure.

### Affordable access control solution

Fortress GB's innovative smart card based access control solution is geared towards universities' unique security needs. It is an affordable solution, which requires low maintenance and is managed easily on a faculty basis and/or by a central management terminal. The introduction of a low cost smart card access control system allows academic institutions to increase the access control points, and security throughout the campus.

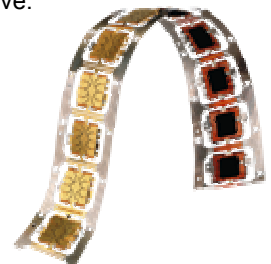
### Unlimited growth potential

The Smart Campus Scheme was designed to provide universities with maximum flexibility for future campus expansion and university growth. There is no limit on the number of cards the system can handle, and the university will literally be able to issue as many cards as it needs. Unique chip design and operating system allow universities to add applications to the same smart card and system in stages, on a one by one basis.

### Additional revenue stream

Academic institutions implementing the Smart Campus Scheme can gain a new additional revenue stream. **Fortress GB** proprietary clearing facility enables to clear transactions made with the smart campus cards in the university and in stores around the campus. The university will receive a commission for every purchase made with a campus card that it issued.

Academic institutions can also negotiate with retailers for reductions when their students use the smart campus card, thus increasing card usage and the commissions they receive.



**FortressGB**

## Applications

### Student Enrolment Management System

The SEMS streamlines registration process for both new students and re-registering students.

Integrating various universities' databases such as finance, library, faculty and student image record, the system will produce a new student card once all the database fields are completed.

Smart campus cards of re-registering students are simply electronically re-activated at the beginning of each new academic year.

Cards can be re-activated either by students, through Kiosks spread around the campus, or at the university's registration office. Students can use the kiosks to change certain details in their files, for example address.

With the SEMS, universities have accurate picture of students' status at the touch of a button. Universities can easily monitor student registering but not attending, students taking a semester off and students not paying their fees.

### PC Network Access Control

Allows universities to continue relying on their PC networks for daily operations, while ensuring that only authorised staff and students use the PCs, databases, network and Internet facilities. Different smart card holders can be given different access rights to certain software and databases. Integrating the PC network access control solution, universities can control PCs usage in the learning resource centres as only authorised smart card holders can use the PCs.



### Access Control to Buildings

The access control solution includes both off and on-line access control solutions for buildings, halls of residence, labs and classrooms. The affordable access solution can be integrated into already existing campus security solutions. The solution requires low maintenance and is easily managed by each department and/or by a central management terminal.

### Time Attendance Monitoring System

This facility provides up-to-the-minute information of students' attendance at lectures. Monitoring takes place both from wall mounted terminals and from portable readers carried by various reports detailing student's attendance. These reports can be customised to list out students' attendance details the way the university wishes.

Using the TAMS, the university can better utilize its resources, for example better allocating classrooms and labs according to the actual number of participating students.

### Electronic Cash

Accepting electronic cash loaded on the smart campus card enables faster transactions and shorter queues. It



also reduces money handling costs, fraud and theft, as well as allowing students and staff to make small transactions with no need to carry change. Students and staff can load their smart campus card through Fortress GB's Kiosks spread around the campus. Existing university's outlets can readily be adapted to accept electronic cash.

Additionally, electronic cash (or coupons) can be used also for photocopying, printing and with vending machines. Universities will also be able to expand the electronic cash beyond the campus to its surrounding, enabling smart campus cardholders to purchase in near by pubs and stores.

### Electronic Purse & Credit Card

**Fortress GB's** smart campus card offers electronic cash with the convenience of a debit and credit card. It is an all-encompassing payment tool for students.

Smart Campus Cards can be used as a payment method not only in the campus but also in various local and national shops. Additionally, the smart campus card can be used on the Internet to purchase goods and services on-line. The transactions are processed at Fortress GB's clearing facility, and the university receives commission for each transaction made with the smart campus card it issues.



### Distance Learning

Smart card technology provides the perfect solution for distance learning through the Internet. Fortress GB's smart campus card allows students to access and submit coursework and other information to their lecturers and university from any PC. The system provides the proof of work by using the electronic signature as a means of identification and authentication of work submitted. Additionally, students can take university's courses on the Internet, gaining access and identifying themselves with their smart campus card.

### Student Voting

Fortress GB's voting application for universities and student unions streamlines the election process and is very easy to manage and maintain. There is no need to count votes manually, and user-friendly reports detailing the voting results are provided immediately.

The election process becomes much more confidential and secure, double voting is totally eliminated, there is no possibility of voting after the election time is up and the complete discretion of the elections is maintained. Voting can take place both in campus and from any PC computer logged on to the Internet. This capability assures a higher vote rate.

### Dormitories Management

Fortress GB has developed a specific management system for dormitories. A main terminal controls access rights to rooms and public areas in the dormitories. In the event that students lose their smart campus card, there is no need to wait days until a third party issues and delivers a new card. Knowing the importance of cards' availability to students, Fortress GB allows the main terminal to personalise a new card immediately. Additionally, the system allows universities to manage the dormitories as a hotel during the summer vacation. The system enables changing the cards expiry dates and to cancel access rights, so visitors will be able to enter their room only during the period they have paid for.

