

# TRUSTIFIER

## university calendar 2013



A hand holding a yellow marker points to a word cloud centered around the word "E-LEARNING". The word cloud includes terms such as "online", "knowledge", "virtual", "student", "content", "time", "courses", "objects", "video", "easily", "participation", "information", "software", "electronic", "teaching", "term", "online", "education", "assessment", "social", "web", "example", "system", "work", "cost", "devices", "internet", "software", "computers", "elearning", "video", "support", "classroom", "system", "work", "cost", "devices", "internet", "software", "computers", "elearning", "video", "support", "assessment", "classroom", "system", "work", "cost", "devices", "internet", "software", "computers", "elearning", "video", "support".

## Introduction

Trustifier University offers a unique set of courses that cover a variety of topics in computing, cyber security and digital asset protection.

**Streams:** The Streams section describes the certifications and accreditations you can receive in Trustifier technologies.

**Requisite Equipment:** For all courses you must have a system capable of live Internet streaming, running a modern operating environment such as Linux, Mac OS X or Microsoft Windows 7. Trustifier is not responsible for providing you with any requisite equipment or lab.

**Pre-requisites:** You must have passed all the exams of pre-requisites before you are allowed to attend a course.

**Co-requisites:** You must attend all co-requests together. Co-requisite courses cannot be substituted with pre-requisites.

**Course codes:** The courses are coded to help you quickly identify the content and nature of the course. The courses are coded in the form *PPP-XYZ*; where PPP is

the course prefix and XYZ are numbers summarizing the course content.

The course-code prefixes are:

CODE	DESCRIPTION
CYS	Theoretical and practical courses in cyber-security
KSE	KSE training courses
HPC	HPCE courses
RYU	RYU courses
TFC	Trustifier Fahrenheit courses
MAT	Mathematics

*X* – The first number indicates the level of the course. Typically a higher level course requires the lower level courses as prerequisites. For example a KSE-3xx course may require some KSE-2xx course(s) as prerequisite(s).

*Y* – The second number indicates content covered within a stream

Content code	Description
1	Pre-sales or sales
2	Implementation engineering
3	Support engineering
4	Development theory

Content code	Description
5	Labs or Practicals
6	Customized co-marketing course
7	OEM development

*Z* – The third number encodes the type of course:

Type	Description
0	Theoretical course
1	Applied knowledge course
2	Laboratory course

**Credits:** Indicates the difficulty and number of credits a course provides towards a stream.

**Course Load:** Each unit is half-day (1/2)

## Streams

You must pass the examinations for the **Core** courses in order to achieve base certification in a particular stream. If you want to achieve **Advanced Certification** you must also pass the exams for **Advanced** courses.

## Trustifier KSE™ Certifications

Trustifier KSE™ Certification Stream has the following streams:

### TRUSTIFIER KSE™ CERTIFIED SOLUTION PROVIDER CERTIFICATION PROGRAM

**Core:** KSE-101, KSE-110, KSE-111, KSE-120, KSE-125, KSE-131

**Advanced:** CYS-201, KSE-200, KSE-220, KSE-225

## Fee Schedule

Course Fees are calculated at \$495 per course-load per person for online instructor driven training.

## Course Outlines

### CYS-100 Introduction to Cyber-security

**SYNOPSIS:** This course provides a high-level review of cyber-security concepts, tools, modern practices and standards. Concepts such as trusted computing, discretionary access control, mandatory access control, integrity control, auditing, cryptography, operating system kernels, kernel vs user-space operations,

processes, system calls, system services, sockets, ports, authentication and identity management, authorization and atomic operations are covered in detail. Trusted computing models such as Bell La Padula, BIBA, Clark-wilson etc. are introduced and their relationship to trusted computing is briefly reviewed.

**PREREQUISITES:** Participants are expected to know and understand enterprise computing; including operating systems, networking, and applications. An understanding of software development concepts is also required.

**COURSE LOAD: 2; CREDITS: 1;**

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## CYS-200 Security Calculus

**SYNOPSIS:** CYS-200 covers advanced concepts in cyber security, in particular algebraic models for trusted computing environments is developed. In particular, the general algebraic models used in Trustifier KSE are developed.

**PREREQUISITES:** CYS-100; Also, basic understanding of abstract algebra and algebraic structures such as groups, rings etc. is useful.

**COURSE LOAD: 2; CREDITS: 2**

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## KSE-101 Introduction to KSE™

**SYNOPSIS:** Introduction to Trustifier KSE™ teaches how to use Trustifier KSE as an end-user and implement various cyber security paradigms. Different security models available in Trustifier KSE are explored in detail with examples of how they are used in real-life scenarios. The concepts of security officer, separation of duty, separation of processes, group-wise trusts, user-to-user trusts, auditing, and root user controls are explored.

**COURSE LOAD: 1; CREDITS: 1**

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## KSE-110 Pre-sales training

**SYNOPSIS:** KSE-110 provides pre-sales training course for Trustifier KSE™ product-line. The course provides an overview of the KSE product-line, its general use in common cyber security scenarios, comparison and contrast with other cyber security solutions in the market. Real-life business and technical scenarios are discussed with possible applications of KSE to solve problems in the cyber-security realm are explored in detail. Topics such as, hacking, insider-

fraud, external and internal attacks, APT etc are covered. Implementation of standards by CERT, SANS institute and other standards bodies are also explored in detail.

**PREREQUISITES:** CYS-100 (or equivalent knowledge); KSE-101

**COURSE LOAD:** 1 unit

**CREDITS:** 1

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## KSE-111 Sales Engineering

**SYNOPSIS:** Trustifier KSE Sales Engineering course discusses in detail real-life scenarios that you would encounter in the field with customers. How to calculate license costs, determine services, deployment and implementation costs for Trustifier KSE solutions. KSE based secure network design, integration with existing infrastructure elements such as identity management tools, authorization tools etc. is studied in detail. Implementing KSE within heterogeneous environments at different caveats on multiple sites is also explored.

**PREREQUISITES:** CYS-100 or equivalent knowledge. KSE-101

**COURSE LOAD:** 1 unit

**CREDITS:** 1

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## KSE-120 Implementation Engineering

**SYNOPSIS:** KSE™ Implementation Engineering is designed to teach you the core concepts of KSE installation, deployment, maintenance, integration and security policy creation across the network. Special emphasis is given to creating separation of duty amongst systems, system operators, network operators and caveat creation. Integration with identity management systems such as NIS+, Linux PAM, Microsoft ADS, IBM Tivoli Identity Manager (TIM), CA IdentityMinder™ etc. is discussed. Advanced controls and management of system audit logs. Multiple RBAC capabilities within KSE are examined for various scenarios.

**Pre-requisite:** KSE-101

**Co-Requisite:** KSE-125

**Course Load:** 2 units

**Credits:** 3

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## KSE-125 Implementation Engineering Laboratory Work

**SYNOPSIS:** KSE-125 is KSE-120's corresponding hands-on course. Participants become familiar with installing, deploying, setting rules for and working with KSE in single implementation and network deployment settings.

**Co-Requisite:** KSE-120

**Course Load:** 2 units

**Course Credits:** 3

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## KSE-131 Support Engineering

**SYNOPSIS:** KSE™ Support Engineering course provides you with all of the training needed to support KSE™ either within your organization or to build a support service practice for your customers. KSE™ support focuses on diagnosing common and uncommon problems and resolving issues that arise from common implementation mistakes or user errors. Particular emphasis is given to trouble shooting services, shared file servers, identity management, authorization controls, auditing and custom applications.

**Pre-requisite:** KSE-101

**Co-Requisite:** KSE-125

**Course Load:** 2 units

**Credits:** 3

MON	TUE	WED	THU	FRI
30 CYC-100	31	1	2 KSE-101	3
6	7	8	9 KSE-110 KSE-111	10
13	14	15	16 KSE-120 KSE-125	17
20	21	22	23 KSE-120 KSE-125	24
27	28	29	30 KSE-131	31