



## WORKSHOP DESCRIPTION

Cloud Computing environments offer users the benefits of reduced cost, shared infrastructure, and great flexibility to match resources and to change needs. Cloud computing also offers a host of new security challenges. For example, will information stored in the cloud remain private, unaltered, and accessible? This workshop presents an overview of CyberSecurity issues for the Cloud Computing environment, including the key issues of privacy, authentication, software security, and system vulnerabilities.

## BENEFITS OF ATTENDING THE WORKSHOP

- An understanding of Cloud Computing architectures and services and how they will affect your organization
- An awareness of the security vulnerabilities for Cloud Computing environments and the best practices for addressing those vulnerabilities
- An opportunity to meet and network with other professionals with interests in computing security
- Exposure to case studies and demonstrations of practical Cloud Computing systems
- Certificate of Completion

## PROGRAM ITINERARY:

### DAY 1 - APRIL 25, 2017

**8:15 - 8:50 am: Breakfast and Registration**

**9:00 am: Inaugural Ceremony**

**9:30 am - 11:00 am: Session 1: An Overview of Cloud Computing**

- Basic Models of Cloud Computing: Software-as-a-Service, Platform-as-a-Service, Infrastructure-as-a-Service
- Public versus Private Clouds
- Cloud Computing Benefits: Cost, Scale, Flexibility
- Cloud Computing Challenges: Data Security, Data Availability, Regulatory Compliance
  - Case Study of Cloud Systems: "Amazon Web Service"

**11:00 am: Coffee Break**

**11:15 am - 1:00 pm: Session 2: Security Basics in Computer Security**

- Security Architecture
- Physical Security
- Operations Security
  - Case Study: "The Human Element"

**1:00 pm - 2:00 pm: Lunch and Prayer Break**

**2:00 pm - 3:30 pm: Session 3: Security Tools**

- Access Controls
- Network Security
- Encryption and Authentication
  - Case Study: "A Costly Data Breach"

**DAY 2 - APRIL 26, 2017**

**9:00 am - 11:00 am: Session 4: Security Management**

- Risk Management
- Incident Management
- Regulatory Compliance
  - Case Study: "A Walled Castle or a Glass House?"

**11:00 am: Coffee Break**

**11:15 am - 1:00 pm: Session 5: Software Security 1**

- Applications Security
- The Role of Certification
- Threat Modelling and attack Patterns
- Software Security Testing
  - Case Study: Disk-wiping malware, the Shamoon Virus, Saudi Aramco, and Qatar's Rasgas.

**1:00 pm - 2:00 pm: Lunch and Prayer Break**

**2:00 pm - 3:30 pm: Session 6: Software Security 2**

- Software Security in the Cloud
- A Cloud Based Computing Architecture
- Cloud Computing Threats
  - Case study examples: Amazon Cloud Services, Social Engineering, Malware Injection, Google Account Hijacking, LastPass Denial of Service.

**DAY 3 - APRIL 27, 2017**

**9:00 am - 11:00 am: Session 7: Virtual Environments**

- Virtual Machines
- Virtual Networks
- Authentication in the Cloud Revisited

**11:00 am: Coffee Break and Prayer Break**

**11:15 am - 12:30 pm: Session 8: Demonstration of a Virtual Network**

- Live Demonstration of a Cloud-Based Virtual Network for CyberSecurity Instruction

**12:30 - 2:00 pm: Session 9: Privacy Versus Security**

- Case Study: "The Dangers of Data Aggregation"
- Case Study: "Privacy versus Public Safety"
- Case Study: "The March of Technology"

**2:00 pm - 2:30 pm: Closing Ceremony**

**2:30 pm - 3:30 pm: Lunch**

# REGISTRATION FORM

**WORKSHOP IN CYBERSECURITY**  
April 25-27, 2017

**Fee:** 400 BD including breakfast, coffee breaks, lunch, and certificate of attendance.

**Student Fee:** 100 BD including breakfast, coffee breaks, lunch, and certificate of attendance.

**Title:** \_\_\_\_\_

**Last Name:** \_\_\_\_\_

**First Name:** \_\_\_\_\_

**Position:** \_\_\_\_\_

**Department:** \_\_\_\_\_

**Organization:** \_\_\_\_\_

**Organization's Address:**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Office Phone Number:** ( \_\_\_\_ ) \_\_\_\_ - \_\_\_\_\_

**Mobile Number:** ( \_\_\_\_ ) \_\_\_\_ - \_\_\_\_\_

**Email Address:** \_\_\_\_\_

### Venue:

**Royal University for Women**  
Gate 366 Muaskar Highway  
West Riffa 942  
Kingdom of Bahrain  
For directions, check the following link:  
[http://www.ruw.edu.bh/location\\_map.php](http://www.ruw.edu.bh/location_map.php)

**For further information and methods of payment, please contact Ms. Aysha Murad, Director of WVU/RUW Global Portal in Bahrain.**  
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