



Federal Reserve System Training Program  
*2013 Course Catalogue*



This booklet includes descriptions of Federal Reserve System examiner training programs as well as FFIEC courses and conferences.

For international distribution



The International Training and Assistance (ITA) website, which includes a link to this complete catalogue as well as our online application system, can be accessed at

**[www.federalreserve.gov/bankinfo/ita/about\\_ita.htm](http://www.federalreserve.gov/bankinfo/ita/about_ita.htm)**



January 2013

Dear Colleagues:

It is our pleasure to provide you with this catalogue of supervisory and regulatory training programs the Federal Reserve System will offer in 2013. These programs are designed for and offered exclusively to supervisory staff and officials from other central banks and regulatory authorities, and provide a forum for participants from around the globe to exchange views and draw lessons learned from practical experience.

The strength of our training programs is that they cover the most pressing supervisory issues, along with a heavy dose of practical knowledge by incorporating case studies, exercises, and group work. All of our training is conducted by our most seasoned subject-matter experts from within the Federal Reserve System who have years of practical, hands-on experience. In today's environment, it is ever more important to focus on training bank supervisors in the fundamental elements of bank examination and supervision techniques, which has been the trademark of our training programs from the onset.

The desire of most countries to adopt best practices prompted the Federal Reserve to be among the first supervisory training providers in the world. To the more than 160 countries that have taken part in Federal Reserve System training programs over the last two decades, I want to thank you for being wonderful partners in our exciting investment in human capital.

Sincerely,

Sarkis D. Yoghourtdjian  
Assistant Director



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\*These programs are designed for and offered exclusively to participants from other central banks and supervisory authorities.

\*\*Participation in this program is by invitation.



# Introduction

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It is our pleasure to provide you with this catalogue of examiner training courses the Federal Reserve System will offer in 2013. The Federal Reserve's 2013 examiner training programs will be held in training facilities at 1850 K Street NW, in Washington, D.C., as well as in the training facilities of the Federal Reserve Banks of Chicago and San Francisco. For your convenience, the catalogue also contains information on courses offered by the Federal Financial Institutions Examination Council (FFIEC) as well as general information about registration procedures, lodging, and other relevant information. It is important that you read the information contained in this catalogue prior to submitting an application or nominating staff from your institution to these training programs. The International Training and Assistance (ITA) Section's website, which includes a link to this complete catalogue, can be accessed online at [www.federalreserve.gov/bankinfo/ita/about\\_ita.htm](http://www.federalreserve.gov/bankinfo/ita/about_ita.htm).

The Federal Reserve is pleased to accommodate colleagues from other bank supervisory authorities and central banks in its training programs on a space-available basis. As most classes fill up quickly, it is recommended that you submit an application or a request to enroll your staff as early as possible. We must ask that all enrollments be made at least *eight weeks* before the starting date of the class.

Prior to the start of the program, every participant registered in a Federal Reserve course will receive a participant letter that provides the course details and lodging and transportation options. Many courses contain some background reading material or pre-course work, which must be completed by the participant prior to the first day of class. The nature of the required pre-course work is listed under each course description along with the estimated amount of time the participant must dedicate to completing it. Pre-course work is designed to bring each participant to a base level of knowledge, thereby enabling instructors to deliver information effectively and use class time efficiently. Again this year, registered participants can download pre-course work, the participant letter, maps, and hotel/area information from a secure website using the e-mail address submitted in their application. *Please note, English proficiency is a requirement for all courses outlined in this catalogue.*

Our courses are designed primarily for bank supervisors. We would like to draw your attention to the joint International Monetary Fund/World Bank/Federal Reserve System "Seminar for Senior Bank Supervisors from Emerging Economies," which is offered every October in Washington, D.C. The objectives of the seminar are to familiarize participants with the importance of bank and financial sector regulation and supervision for economic growth and development; to consider alternative regulatory and supervisory approaches and related international trends; to discuss solutions for dealing with bank insolvency and financial system distress; and to learn about the latest developments in supervision and on-site examination techniques.

You will note in this year's catalogue that several new courses, features, and services are being offered:

- *Liquidity Risk Management Seminar*: The curriculum for this new course is designed to prepare market and liquidity risk examiners to assess and evaluate the liquidity risk management practices of financial institutions. The course focuses on cash flow modeling, stress testing, and international regulatory requirements.

# Introduction

- *Technology Risk Supervision Seminar.* This new course builds on foundational concepts of networks and operating systems and covers applied topics of risks, system management, controls, data management, and emerging technologies. The seminar is appropriate for both information technology and safety-and-soundness examiners who have a basic understanding of IT concepts and are exposed to IT-related issues during examinations.
- *Joint International Monetary Fund/World Bank/Federal Reserve System – “Financial Crimes Detection Workshop.”* This new program is designed for bank examiners, investigators, auditors, accountants, ethics and compliance officers, and financial intelligence and risk analysts working in the public sector who wish to acquire knowledge or refresh their skills on concepts, issues, trends, and developments relating to a broad array of financial crimes, including corruption, bank fraud, and money laundering, and techniques for tracing and recovering assets and detecting and investigating financial crimes.
- *ITA Course Online Registration System.* ITA’s online application system simplifies and expedites registration for courses offered in this catalogue. Complete details of our web-based electronic application process and answers to frequently asked questions can be found at [www.federalreserve.gov/bankinfo/ita/about\\_ita.htm](http://www.federalreserve.gov/bankinfo/ita/about_ita.htm). Application forms are located on each course description page at [www.federalreserve.gov/bankinfo/ita/courses.htm](http://www.federalreserve.gov/bankinfo/ita/courses.htm). If you need further information, please e-mail us at [BSRInternationalTraining@frb.org](mailto:BSRInternationalTraining@frb.org).
- *Access to online participant letters and pre-course reading materials.* Once an application and all required personal information are received, approved participants will be able to download (using their registered e-mail addresses) all relevant course materials directly from an IntraLinks exchange, using a secure online file storage and sharing platform. Approximately six weeks before the start of each class, participant letters; pre-course materials; and lodging, transportation, and course information will be stored on the IntraLinks exchange.
- *Fifth Annual Joint Banque de France International Banking and Finance Institute/Federal Reserve System “Seminar on Credit Risk Assessment and Control.”* This seminar is designed to broaden participants’ knowledge of credit risk management. Among other topics, case studies will cover the Basel rules for credit risk, credit risk management (including risk-adjusted return on capital and portfolio management), stress testing and implementation by banks, and validation of advanced systems. Presentations will be made simultaneously in French and English.
- Training programs in this year’s catalogue are listed in alphabetical order for ease of reference.

Lastly, please note that all inquiries concerning the Federal Reserve’s international training and technical assistance program may be submitted to

Mr. Sarkis D. Yoghourtdjian  
Assistant Director  
Division of Banking Supervision and Regulation  
Board of Governors of the Federal Reserve System  
Washington, DC 20551

# Introduction

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## Meet the Staff



John McCormick  
Manager



Mark Dorin  
*Senior Financial Analyst*



Fady Sidhom  
*Intern*



Jose Pignano  
*Supervisory Financial Analyst*



Maribeth Seraj  
*Curriculum Analyst*



Sheila Simms  
*Senior International Training and  
Assistance Technician*

The International Training and Technical Assistance Section  
Division of Banking Supervision and Regulation  
Board of Governors of the Federal Reserve System  
Washington, D.C.



# General Information

General Information



# General Information

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## Who May Attend?

Programs outlined in this catalogue are open to banking supervision staff from central banks and bank supervisory authorities outside the United States.

## Registration Procedures

You may submit an application form online through ITA's website at [www.federalreserve.gov/bankinforeg/ita/courses.htm](http://www.federalreserve.gov/bankinforeg/ita/courses.htm). Select a course from the list of courses, and on the interactive course description page, click "Apply Now" to complete the application form. You will receive a confirmation number by e-mail to be used in all future correspondence. Please obtain approval from your institution before you apply for a training program. Completed applications will not be processed until we also receive an official, signed letter of endorsement from an officer of your institution. The letter may be faxed to +1-202-452-6417 or scanned and e-mailed to [BSRInternationalTraining@frb.gov](mailto:BSRInternationalTraining@frb.gov). Please mail the original letter on official stationery to

Mr. Sarkis D. Yoghourtdjian  
Assistant Director  
Division of Banking Supervision and Regulation  
Board of Governors of the Federal Reserve System  
20th and C Streets NW - Mail Stop 1819  
Attention: Course Registrar  
Washington, DC 20551

More information about our web-based application system can be found at [www.federalreserve.gov/bankinforeg/ita/about\\_ita.htm](http://www.federalreserve.gov/bankinforeg/ita/about_ita.htm).

## Security Procedures

Please note that the Federal Reserve has put in place security measures requiring each participant in a Federal Reserve program to submit his or her *date of birth, passport number, and country of passport issuance* as soon as possible. This information must be received prior to an application's approval.

**There will be no exceptions. Failure to provide the necessary information will result in forfeiture of the seat.**

## Tuition

There are no tuition fees for Federal Reserve or FFIEC programs outlined in this catalogue. The Options Institute Program at the Chicago Board Options Exchange (CBOE) carries a \$775 tuition fee per participant. Participants are requested to pay the tuition fee with a credit card directly to the CBOE on the first day of the program.

# General Information

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## Lodging Information

In light of uncertainties involved with the more extensive travel arrangements required of those arriving from abroad, the Federal Reserve does not make lodging arrangements for participants attending programs in Washington, D.C. or elsewhere. **It will be up to the participants to arrange their own accommodations.** For those invited to attend the joint International Monetary Fund/World Bank/Federal Reserve “Seminar for Senior Bank Supervisors from Emerging Economies” and the “Seminar on Policy Challenges for the Financial Sector” only, seminar organizers will secure blocks of rooms at select area hotels. It will be up to the participants to make their own reservations with these hotels and provide a credit card guarantee.

## Pre-Course Materials

Pre-course materials will be made available after all required information, including the participant’s date of birth, passport number, and name of country issuing the passport, has been received and the application has been approved. Upon approval of an application, the participant will receive an e-mail from IntraLinks providing access to the secure online exchange where the program’s participant letter and pre-course materials (if any) will be available approximately six weeks before the start of a program.

## Dress Code

Business casual attire is permitted for all programs offered in this catalogue, except for the joint IMF/World Bank/Federal Reserve seminars conducted in June and October, which require business attire. Tennis shoes, T-shirts, blue jeans, and shorts should not be worn.

## Attendance Policy

Participants in Federal Reserve and FFIEC training programs are expected to be in attendance at each session of the program. Please notify an ITA Section staff member if absences are unavoidable. Unexplained absences from a training session will be reported to the proper authorities.

## Travel and Medical Insurance

Please note that the Federal Reserve does **not** provide any insurance coverage for participants traveling to, from, or staying in the United States. Please ensure that there is adequate medical insurance in place for your needs. Any medical costs incurred in the United States will be the participant’s responsibility or the responsibility of the participant’s institution.

## Cancellation Policy

To cancel participation in a Federal Reserve or FFIEC training program, please send a letter to Mr. Sarkis Yoghourtdjian at the address below. The letter must be on official stationery and signed by an officer of your institution. **If participation is not cancelled and the participant does not report to the training facility on the first day of the program, security procedures require us to notify the proper authorities, including the U.S. visa issuing agency.**

# General Information

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## Training Facilities in Washington, D.C.

The ITA Section is pleased to welcome all participants in our Washington, D.C.-based courses to the Federal Reserve’s training facility at 1850 K Street NW. Situated in the heart of Washington’s central business district, 1850 K Street is located within the International Square Building, which occupies the entire block between 18th and 19th Streets and between I (Eye) and K Streets, NW. Participants may enter the International Square Building at any of its three entrances located at the corners of I (Eye) and 18th Streets, I (Eye) and 19th Streets, and K and 19th Streets. Visitors will find a central atrium upon entering the International Square Building. Opening onto this atrium are separate lobbies for each of the three buildings that comprise the International Square Building complex, designated as 1825 I (Eye) Street, 1850 K Street, and 1875 K Street.

Visitors should proceed to the lobby of 1850 K Street, NW, where they will be asked to show their identification to the building’s concierge and sign the guest book. The concierge will direct the visitors to the elevators for the Federal Reserve’s training center. Located on the fourth floor, the Federal Reserve’s classrooms are equipped with state-of-the-art technology.

International Square’s lower level features a food court that offers American, Asian, Greek, Mexican, Indian, and Cuban fast food selections. The lower level also allows direct access to the subway system through the “Farragut West” metro station, serviced by the blue and orange metro lines.

Please note, smoking and the use of tobacco products are prohibited throughout the International Square complex.

## Questions?

Should you have any questions, you may direct them to

Mr. Sarkis D. Yoghourtdjian  
Assistant Director, *or*

Ms. Maribeth Seraj  
Curriculum Analyst

Division of Banking Supervision and Regulation  
Board of Governors of the Federal Reserve System  
Washington, DC 20551  
Fax: +1-202-452-6417  
[BSRInternationalTraining@frb.gov](mailto:BSRInternationalTraining@frb.gov)

## General Information

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### Hotels near the Federal Reserve's Training Center in Washington, D.C.

For your reference and information, listed below are a number of hotels within close proximity to the Federal Reserve's training center at 1850 K Street NW, Washington, D.C. You are free to make hotel reservations at these or other hotels. Since Washington, D.C. is a popular destination, *early* registration will ensure the best selection of hotel rooms and rates.

\*Walking distance

\*\*Taxi or 20–30 minute walk

**\*Club Quarters**

839 17th Street NW  
Washington, DC 20006  
Tel: +1-212-575-0006  
Fax: +1-212-391-5525  
[www.clubquarters.com](http://www.clubquarters.com)

**\*\*Washington Marriott**

1221 22nd Street NW  
Washington, DC 20037  
Tel: +1-202-872-1500  
Fax: +1-202-872-1424  
[www.marriott.com](http://www.marriott.com)

**\*Hotel Lombardy**

2019 Pennsylvania Avenue NW  
Washington, DC 20006  
Tel: +1-202-828-2600  
Fax: +1-202-872-0503  
[www.hotellombardy.com](http://www.hotellombardy.com)

**\*\* Hilton Garden Inn Washington DC Downtown**

815 14th Street NW  
Washington, DC 20005  
Tel: +1-202-783-7800  
Fax: +1-202-783-7801  
[www.hiltongardeninn.com](http://www.hiltongardeninn.com)

**\*The Quincy Hotel**

1823 L Street NW  
Washington, DC 20036  
Tel: +1-202-223-4320  
Fax: +1-202-293-4977  
[www.thequincy.com](http://www.thequincy.com)

**\*\*Double Tree Guest Suites Hotel**

801 New Hampshire Avenue NW  
Washington, DC 20037  
Tel: +1-202-785-2000  
Fax: +1-202-785-9485  
[www.doubletree.com](http://www.doubletree.com)

**\*One Washington Circle**

1 Washington Circle NW  
Washington, DC 20037  
Tel: +1-202-872-1680  
Fax: +1-202-887-4989  
[www.thecirclehotel.com](http://www.thecirclehotel.com)

**\*\*The Dupont Hotel**

1500 New Hampshire Avenue NW  
Washington, DC 20036  
Tel: +1-202-483-6000  
Fax: +1-202-328-3265  
[www.doylecollection.com](http://www.doylecollection.com)

**\*AKA White House**

1710 H Street NW  
Washington, DC 20006  
Tel: +1-202-904-2500  
Fax: +1-202-904-2525  
[www.stayaka.com](http://www.stayaka.com)

**\*\*State Plaza Hotel**

2117 E Street NW  
Washington, DC 20037  
Tel: +1-202-861-8200  
Fax: +1-202-659-8601  
[www.stateplaza.com](http://www.stateplaza.com)

## General Information

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### \*\*Melrose Hotel

2430 Pennsylvania Avenue NW  
Washington, DC 20037  
Tel: +1-202-955-6400  
Fax: +1-202-955-5765  
[www.melrosehoteldc.com](http://www.melrosehoteldc.com)

### \*\*Avenue Suites

2500 Pennsylvania Avenue  
Washington, DC 20037  
Tel: +1-202-333-8060  
Fax: +1-202-338-3818  
[www.avenuesuites.com](http://www.avenuesuites.com)

### \*\*Best Western Georgetown Hotel & Suites

1121 New Hampshire Avenue NW  
Washington, DC 20037  
Tel: +1-202-457-0565  
Fax: +1-202-331-9421  
[www.bestwestern.com](http://www.bestwestern.com)

### \*\*River Inn

924 25th Street NW  
Washington, DC 20037  
Tel: +1-202-337-7600  
Fax: +1-202-337-6520  
[www.theriverinn.com](http://www.theriverinn.com)

### \*\* The Hamilton Crowne Plaza Hotel

1001 14th Street NW  
Washington, DC 20005  
Tel: +1-202-682-0111  
Fax: +1-202-682-3801  
[www.ichotelsgroup.com](http://www.ichotelsgroup.com)

## Hotels in Virginia

These hotels are included for consideration since they typically charge less than hotels in D.C., although a 15 or 20 minute metro ride (approximately \$5.00 round trip) is necessary to arrive at the Federal Reserve's training center at 1850 K Street NW, Washington, D.C.

### Best Western Rosslyn/Iwo Jima

1501 Arlington Boulevard  
Arlington, VA 22209  
Tel: +1-703-524-5000  
Fax: +1-703-522-5484  
[www.bestwestern.com](http://www.bestwestern.com)

### Americana Hotel

1400 Jefferson Davis Highway  
Arlington, VA 22202  
Tel: +1-703-979-3772  
Fax: +1-703-979-0547  
[www.americanahotel.com](http://www.americanahotel.com)

### Inns of Virginia Arlington

3335 Lee Highway  
Arlington, VA 22201  
Tel: +1-703-524-9800  
Fax: +1-703-524-9800  
[www.innsofvirginia.com](http://www.innsofvirginia.com)

## General Information

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### The Federal Reserve Bank of Chicago will host the following classes:

- **Liquidity Risk Management Seminar** May 13–17 (see page 25)
- **Technology Risk Supervision Seminar** May 20–23 (see page 37–39)
- **S.T.R.E.A.M./Technology Lab Courses** (see pages 5–6, 53–67)

The Federal Reserve Bank of Chicago is located at  
**230 South LaSalle Street, Chicago, Illinois**

### Hotels near the Federal Reserve Bank of Chicago

Listed below are a number of hotels within close proximity to the Federal Reserve Bank of Chicago. You are free to make hotel reservations at these or other hotels.

\*Walking distance

\*\*Taxi or 20–30 minute walk

\*Palmer House Hilton Hotel  
17 East Monroe Street  
Chicago, IL 60603  
Tel: +1-312-726-7500  
Fax: +1-312-917-1707  
[www.hilton.com](http://www.hilton.com)

\*Club Quarters Central Loop  
111 West Adams Street  
Chicago, IL 60603  
Tel: +1-312-214-6400  
Fax: +1-312-601-3300  
[www.clubquarters.com](http://www.clubquarters.com)

\*J. W. Marriott Chicago  
151 West Adams Street  
Chicago, IL 60603  
Tel: +1-312-660-8200  
Fax: +1-312-660-8201  
[www.marriott.com](http://www.marriott.com)

\*The W Chicago City Centre  
172 West Adams Street  
Chicago, IL 60603  
Tel: +1-312-332-1200  
Fax: +1-312-332-5909  
[www.starwoodhotels.com](http://www.starwoodhotels.com)

\*Club Quarters Wacker at Michigan  
75 East Wacker Drive  
Chicago, IL 60601  
Tel: +1-312-357-6400  
Fax: +1-312-357-9900  
[www.clubquarters.com](http://www.clubquarters.com)

\*\*Hyatt Regency  
151 East Wacker Drive  
Chicago, IL 60601  
Tel: +1-312-565-1234  
Fax: +1-312-239-4414  
[www.chicagoregency.hyatt.com](http://www.chicagoregency.hyatt.com)

\*\*Hilton Chicago  
720 South Michigan Avenue  
Chicago, IL 60605  
Tel: +1-312-922-4400  
Fax: +1-312-922-5240  
[www.hilton.com](http://www.hilton.com)

\*\*Sheraton Chicago Hotel & Towers  
301 East North Water Street  
Chicago, IL 60611  
Tel: +1-312-464-1000  
Fax: +1-312-464-9140  
[www.sheratonchicago.com](http://www.sheratonchicago.com)

## General Information

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**\*\*Omni Chicago**  
676 North Michigan Avenue  
Chicago, IL 60611  
Tel: +1-312-944-6664  
Fax: +1-312-266-3015  
[www.omnihotels.com](http://www.omnihotels.com)

**\*\*Chicago Marriott Downtown**  
540 North Michigan Avenue  
Chicago, IL 60611  
Tel: +1-312-836-0100  
Fax: +1-312-836-6139  
[www.marriott.com](http://www.marriott.com)

**\*\*Residence Inn Chicago**  
Downtown/Magnificent Mile  
201 East Walton Place  
Chicago, IL 60611  
Tel: +1-312-943-9800  
Fax: +1-312-943-8579  
[www.marriott.com](http://www.marriott.com)

**\*\*Sofitel Chicago**  
20 East Chestnut Street  
Chicago, IL 60611  
Tel: +1-312-324-4000  
Fax: +1-312-324-4026  
[www.sofitel.com](http://www.sofitel.com)

## General Information

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**The Federal Reserve Bank of San Francisco will host the following classes:**

- **Risk Management and Internal Controls Seminar** August 12–16 (see page 35)
- **Real Estate Lending Seminar** September 23–27 (see page 33–34)

The Federal Reserve Bank of San Francisco is located at  
**101 Market Street, San Francisco, California**

### Hotels near the Federal Reserve Bank of San Francisco

Listed below are a number of hotels within close proximity to the Federal Reserve Bank of San Francisco. You are free to make hotel reservations at these or other hotels.

\*Walking distance

\*\*Taxi /Cablecar or 20–30 minute walk

\*Hyatt Regency

5 Embarcadero Center  
San Francisco, CA 94111  
Tel: +1-415-788-1234  
Fax: +1-415-398-2567

[www.sanfranciscoregency.hyatt.com](http://www.sanfranciscoregency.hyatt.com)

\*Hotel Griffon

155 Steuart Street  
San Francisco, CA 94105  
Tel: +1-415-495-2100  
Fax: +1-415-495-3522

[www.hotelgriffon.com](http://www.hotelgriffon.com)

\*Harbor Court Hotel

165 Steuart Street  
San Francisco, CA 94105  
Tel: +1-415-882-1300  
Fax: +1-415-882-1313

[www.harborcourthotel.com](http://www.harborcourthotel.com)

\*Club Quarters

424 Clay Street  
San Francisco, CA 94111  
Tel: +1-415-392-7400  
Fax: +1-415-392-7300

[www.clubquarters.com](http://www.clubquarters.com)

\*\*Hotel Triton

342 Grant Avenue  
San Francisco, CA 94108  
Tel: +1-415-394-0500  
Fax: +1-415-394-0555

[www.hoteltriton.com](http://www.hoteltriton.com)

\*\*Grand Hyatt

345 Stockton Street  
San Francisco, CA 94108  
Tel: +1-415-398-1234  
Fax: +1-415-391-1780

[www.grandsanfrancisco.hyatt.com](http://www.grandsanfrancisco.hyatt.com)

\*\*Hotel Nikko

222 Mason Street  
San Francisco, CA 94102  
Tel: +1-415-394-1111  
Fax: +1-415-394-1106

[www.hotelnikkosf.com](http://www.hotelnikkosf.com)

\*\*The Prescott Hotel

545 Post Street  
San Francisco, CA 94102  
Tel: +1-415-563-0303  
Fax: +1-415-563-6831

[www.prescotthotel.com](http://www.prescotthotel.com)

# General Information

## Duration of Programs

### Federal Reserve System Center for Online Learning

Supervision Training and Reference Tool (STaRT) Modules ..... Variable

### Federal Reserve System Courses

Advanced Credit Risk Measurement and Management Seminar .....	1 week
Anti-Money Laundering Examination Seminar.....	1 week
Bank Analysis and Examination School.....	1 week
Consolidated Supervision and Risk Integration Seminar .....	1 week
Credit Risk Analysis School .....	1 week
Liquidity Risk Management Seminar .....	1 week
Market Risk Analysis Seminar.....	1 week
Operational Risk Assessment Seminar .....	1 week
Principles of Asset/Liability Management Seminar .....	1 week
Real Estate Lending Seminar.....	1 week
Risk Management and Internal Controls Seminar .....	1 week
Technology Risk Supervision Seminar.....	1 week
Joint Banque de France International Banking and Finance Institute/Federal Reserve System – “Seminar on Credit Risk Assessment and Control” .....	1 week
Joint International Monetary Fund/World Bank/Federal Reserve Board – “Seminar on Policy Challenges for the Financial Sector” .....	3 days
Joint International Monetary Fund/World Bank/Federal Reserve System – “Financial Crimes Detection Workshop” .....	1 week
Joint International Monetary Fund/World Bank/Federal Reserve System – “Seminar for Senior Bank Supervisors from Emerging Economies” .....	2 weeks

### S.T.R.E.A.M. Technology Lab - Federal Reserve Bank of Chicago Courses

Information Systems Vulnerability Management .....	1 week
IT Supervisory Themes and Emerging Topics .....	1 week
Network Security .....	1 week
Operating Systems .....	1 week

### Federal Financial Institutions Examination Council (FFIEC) Courses

Financial Crimes Seminar.....	3½ days
International Banking School .....	1 week
Payment Systems Risk Conference .....	3½ days

### Other Agency Courses

The Options Institute (CBOE) .....	3 days
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# Schedules



# Schedule - Federal Reserve System

<u>Program</u>	<u>From</u>	<u>To</u>
IT Supervisory Themes and Emerging Topics Session 1 (Chicago, IL)	April 29	May 3
<b>Liquidity Risk Management Seminar</b> (Chicago, IL)	May 13	May 17
<b>Technology Risk Supervision Seminar</b> (Chicago, IL)	May 20	May 23
Real Estate Lending Seminar Session 1 (Richmond, VA)	June 3	June 7
<b>Joint International Monetary Fund/World Bank/Federal Reserve Board<sup>1</sup> – “Seminar on Policy Challenges for the Financial Sector”</b> (Washington, DC)	June 5	June 7
<b>Credit Risk Analysis School</b> (Washington, DC)	June 17	June 21
Joint Banque de France International Banking and Finance Institute/Federal Reserve System – “Seminar on Credit Risk Assessment and Control” (Paris, France)	June 17	June 21
<b>Advanced Credit Risk Measurement and Management Seminar</b> (Washington, DC)	June 24	June 28
Information Systems Vulnerability Management Session 1 (Chicago, IL)	June 24	June 28
<b>Joint International Monetary Fund/World Bank/Federal Reserve System – “Financial Crimes Detection Workshop”</b> (Washington, DC)	July 15	July 19
<b>Bank Analysis and Examination School</b> (Washington, DC)	July 22	July 26
Network Security Session 1 (Chicago, IL)	July 22	July 26
<b>Market Risk Analysis Seminar</b> (Washington, DC)	July 29	August 2
Financial Crimes Seminar Session 1 (Arlington, VA)	August 12	August 15
<b>Risk Management and Internal Controls Seminar</b> (San Francisco, CA)	August 12	August 16
International Banking School (Arlington, VA)	August 12	August 16
<b>Principles of Asset/Liability Management Seminar</b> (Washington, DC)	August 19	August 23
<b>Operational Risk Assessment Seminar</b> (Washington, DC)	August 26	August 30
<b>Anti-Money Laundering Examination Seminar</b> (Washington, DC)	September 9	September 13
Operating Systems Session 1 (Chicago, IL)	September 9	September 13
The Options Institute (Chicago, IL)	September 11	September 13
Real Estate Lending Seminar Session 2 (San Francisco, CA)	September 23	September 27
Financial Crimes Seminar Session 2 (Arlington, VA)	September 30	October 3
<b>Consolidated Supervision and Risk Integration Seminar</b> (Washington, DC)	September 30	October 4
IT Supervisory Themes and Emerging Topics Session 2 (Chicago, IL)	September 30	October 4

**Note: Schools and programs denoted in bold text are designed for and offered exclusively to participants from other central banks and supervisory authorities.**

<sup>1</sup>Participation in this program is by invitation

## Schedule - Federal Reserve System

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<u>Program</u>	<u>From</u>	<u>To</u>
Network Security Session 2 (Chicago, IL)	October 7	October 11
<b>Joint International Monetary Fund/World Bank/Federal Reserve System – “Seminar for Senior Bank Supervisors from Emerging Economies”</b> (Washington, DC)	October 21	November 1
Payment Systems Risk Conference (Arlington, VA)	October 28	October 31
Information Systems Vulnerability Management Session 2 (Chicago, IL)	October 28	November 1
Operating Systems Session 2 (Chicago, IL)	December 9	December 13

# Schedule - S.T.R.E.A.M. Technology Lab - Federal Reserve Bank of Chicago

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<u>Program</u>	<u>From</u>	<u>To</u>
<b>Information Systems Vulnerability Management</b>		
Session 1	June 24	June 28
Session 2	October 28	November 1
<b>IT Supervisory Themes and Emerging Topics</b>		
Session 1	April 29	May 3
Session 2	September 30	October 4
<b>Network Security</b>		
Session 1	July 22	July 26
Session 2	October 7	October 11
<b>Operating Systems</b>		
Session 1	September 9	September 13
Session 2	December 9	December 13

NOTE: All S.T.R.E.A.M. Technology Lab schools are held at the  
**Federal Reserve Bank of Chicago, 230 South LaSalle Street, Chicago, Illinois.**

## Hotels near the Federal Reserve Bank of Chicago

Listed below are a number of hotels within close proximity to the Federal Reserve Bank of Chicago. You are free to make hotel reservations at these or other hotels.

\*Walking distance

\*\*Taxi or 20–30 minute walk

### \*Palmer House Hilton Hotel

17 East Monroe Street

Chicago, IL 60603

Tel: +1-312-726-7500

Fax: +1-312-917-1707

[www.hilton.com](http://www.hilton.com)

### \*Club Quarters Central Loop

111 West Adams Street

Chicago, IL 60603

Tel: +1-312-214-6400

Fax: +1-312-601-3300

[www.clubquarters.com](http://www.clubquarters.com)

### \*J. W. Marriott Chicago

151 West Adams Street

Chicago, IL 60603

Tel: +1-312-660-8200

Fax: +1-312-660-8201

[www.marriott.com](http://www.marriott.com)

### \*The W Chicago City Centre

172 West Adams Street

Chicago, IL 60603

Tel: +1-312-332-1200

Fax: +1-312-917-5771

[www.starwoodhotels.com](http://www.starwoodhotels.com)

# Schedule - S.T.R.E.A.M. Technology Lab - Federal Reserve Bank of Chicago

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\*Club Quarters Wacker at Michigan  
75 East Wacker Drive  
Chicago, IL 60601  
Tel: +1-312-357-6400  
Fax: +1-312-357-9900  
[www.clubquarters.com](http://www.clubquarters.com)

\*\*Hilton Chicago  
720 South Michigan Avenue  
Chicago, IL 60605  
Tel: +1-312-922-4400  
Fax: +1-312-922-5240  
[www.hilton.com](http://www.hilton.com)

\*\*Omni Chicago  
676 North Michigan Avenue  
Chicago, IL 60611  
Tel: +1-312-944-6664  
Fax: +1-312-266-3015  
[www.omnihotels.com](http://www.omnihotels.com)

\*\*Chicago Marriott Downtown  
540 North Michigan Avenue  
Chicago, IL 60611  
Tel: +1-312-836-0100  
Fax: +1-312-836-6139  
[www.marriott.com](http://www.marriott.com)

\*\*Hyatt Regency  
151 East Wacker Drive  
Chicago, IL 60601  
Tel: +1-312-565-1234  
Fax: +1-312-239-4414  
[www.chicagoregency.hyatt.com](http://www.chicagoregency.hyatt.com)

\*\*Sheraton Chicago Hotel & Towers  
301 East North Water Street  
Chicago, IL 60611  
Tel: +1-312-464-1000  
Fax: +1-312-464-9140  
[www.sheratonchicago.com](http://www.sheratonchicago.com)

\*\*Residence Inn Chicago  
Downtown/Magnificent Mile  
201 East Walton Place  
Chicago, IL 60611  
Tel: +1-312-943-9800  
Fax: +1-312-943-8579  
[www.marriott.com](http://www.marriott.com)

\*\*Sofitel Chicago  
20 East Chestnut Street  
Chicago, IL 60611  
Tel: +1-312-324-4000  
Fax: +1-312-324-4026  
[www.sofitel.com](http://www.sofitel.com)

# Schedule - Federal Financial Institutions Examination Council (FFIEC)

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<u>Program</u>	<u>From</u>	<u>To</u>
<b>International Banking School</b>	August 12	August 16
<b>Financial Crimes Seminar</b>		
Session 1	August 12	August 15
Session 2	September 30	October 3
<b>Payment Systems Risk Conference</b>	October 28	October 31

NOTE: All FFIEC courses are held at the  
**L. William Seidman Center at 3501 Fairfax Drive, Arlington, Virginia**  
 (a suburb of Washington, DC).

## Hotels near the FFIEC’s training facility in Arlington, Virginia

Listed below are a number of hotels within close proximity to FFIEC’s training facility in Arlington, Virginia. You are free to make hotel reservations at these or other hotels.

\*Walking distance

\*\*Taxi or 20–30 minute walk

**\*FDIC Training Center Lodging Facility**

1001 North Monroe Street

Arlington, VA 22226

Tel: +1-703-516-4630

Fax: +1-703-516-5476

**\*Hilton Arlington**

950 North Stafford Street

Arlington, VA 22203

Tel: +1-703-528-6000

Fax: +1-703-812-5127

[www.hilton.com](http://www.hilton.com)

**\*\*Holiday Inn Arlington**

4610 North Fairfax Drive

Arlington, VA 22203

Tel: +1-703-243-9800

Fax: +1-703-527-2677

[www.holidayinn.com](http://www.holidayinn.com)

**\*\*The Virginian Suites**

1500 Arlington Boulevard

Arlington, VA 22209

Tel: +1-703-522-9600

Fax: +1-703-842-9279

[www.virginiansuites.com](http://www.virginiansuites.com)

**\*\*Best Western Rosslyn/Iwo Jima**

1501 Arlington Boulevard

Arlington, VA 22209

Tel: +1-703-524-5000

Fax: +1-703-522-5484

[www.bestwestern.com](http://www.bestwestern.com)



# Federal Reserve System Center for Online Learning



# Supervision Training and Reference Tool (STaRT) Modules

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The Federal Reserve System is pleased to make available to our colleagues from other central banks and supervisory authorities an online training tool for bank examiners called the Supervision Training and Reference Tool, or STaRT.

## Type of Participant Targeted

STaRT was originally designed for Federal Reserve examination staff, and it contains a number of references to U.S.-specific regulations and terminology. However, STaRT is now available and appropriate for use by other bank regulators who wish to familiarize themselves with universal banking concepts, banking procedures, examination practices and goals, and specific subject matter areas.

## Prerequisites

None.

## Course Overview

STaRT contains 32 main learning modules (e.g., Asset/Liability Management, Internal/External Audit, Wire Transfer, etc). Each module consists of a set of individual lessons, practice case studies covering key concepts, potential red flags and the controls used to detect or address those flags, resource materials, typical exam goals, and a self-check to review information learned from the lesson.

## Course Objectives

STaRT was developed by subject-matter experts across the Federal Reserve System to assist supervision staff. STaRT has two primary purposes: (1) to provide general training to examiners on a variety of relevant topics and (2) to support examiners and other supervision staff as an on-the-job reference tool.

## How to Access the STaRT Modules

You may access the STaRT Modules by visiting the public website of the Federal Reserve Board's International Training and Technical Assistance section at [www.federalreserve.gov/bankinforeg/ita/about\\_ita.htm](http://www.federalreserve.gov/bankinforeg/ita/about_ita.htm). Select "Self-study tools," which will provide you with a direct link to the STaRT Modules.

# Supervision Training and Reference Tool (STaRT) Modules

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## Curriculum Overview

1	First-Time User
2	Allowance for Loan and Lease Losses
3	Analyzing Agricultural Credits
4	Asset Liability Management
5	BSA/AML
6	Bankruptcy
7	BHC Regulations
8	Borrowings
9	Capital Issuance
10	Cash and Due From Correspondent Banks
11	Commercial Loan Documentation
12	Deposits
13	Discount Window
14	Federal Reserve Act
15	Fixed Assets
16	Information Technology
17	Internal/External Audit
18	Investment Portfolio Management
19	Kiting
20	Loan Policy and Administration
21	Miscellaneous Other Assets
22	Mortgage Securities
23	Official Checks
24	Other Real Estate
25	Real Estate Fundamentals
26	Regulation O
27	Regulations T, U, & X
28	Regulation W
29	Right to Financial Privacy
30	Troubled Debt Restructuring
31	Trust Fundamentals
32	Wire Transfer

# Federal Reserve System

## Course Descriptions



# Advanced Credit Risk Measurement and Management Seminar

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## Type of Participant Targeted

The Advanced Credit Risk Measurement and Management Seminar is a course designed for individuals with five or more years of experience with credit risk management. The purpose of the seminar is to provide participants with an overview of advanced credit risk measurement and management techniques from an internal management and supervisory perspective. The seminar provides supervisors with an introduction to the management and examination techniques used to evaluate the effectiveness of advanced risk measurement and management systems.

## Prerequisites

None.

## Course Overview

This one-week seminar consists of a series of lectures and group exercises intended to provide participants with an overview of the advanced risk measurement and management systems banks employ to monitor credit risk. Lectures will address the estimation and calculation of the inputs into advanced credit risk measurement systems such as probability of default and loss-given default, portfolio management techniques, and the governance necessary to employ these advanced systems. Lectures will also focus on basic methods supervisors can employ to understand and evaluate the effectiveness of banks' implementation of these advanced credit risk management systems. Group work will take the form of a case study and give participants an opportunity to practice and reinforce the techniques discussed during the lectures.

## Course Objectives

At the end of the seminar, participants should have an understanding of the following:

- The fundamental building blocks an institution must have in place before it begins developing more advanced models and techniques
- What type and quality of data a bank needs to have
- What each of the advanced credit risk metrics are and how they are derived
- Basics of how to examine a bank's models
- Fundamentals of modern portfolio theory and its practical implementation
- Basic portfolio management exam techniques
- What to expect from a board of directors
- What to expect from a senior management team
- The roles of internal and external audit and the role of loan review, including how to examine these functions
- How advanced credit metrics can be used

# Advanced Credit Risk Measurement and Management Seminar

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## Curriculum Overview

Subject	Approximate Class Days
Fundamentals of credit risk management	.50
Fundamentals of credit data and data governance	.25
Advanced credit risk measurement metrics	1.00
Portfolio management	1.00
Governance of advanced risk measurement and management systems	1.00
Uses for advanced risk measurement and management systems	.25
TOTAL	4.00

# Anti-Money Laundering Examination Seminar

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## Type of Participant Targeted

This program is for all examiners with more than six months of field examination experience and an interest in developing techniques for targeted anti-money laundering and counter-terrorist financing examinations.

## Prerequisites

None.

## Course Overview

This course is designed to provide examiners with an understanding of the importance of reviewing the operational, legal, and reputational risks with regard to money laundering and terrorist financing and their impact on the overall bank rating assessment. The course provides examiners with guidance on assessing the money laundering risks associated with know-your-customer procedures, foreign correspondent banking, wire transfers, private banking, counter-terrorist financing, and suspicious activity reporting. This course will also discuss the USA PATRIOT Act and the current FATF 40 + 9 recommendations and will cover the U.S. experience and regulatory perspective. The case study method will be utilized to highlight and analyze certain key risks in a bank's high-risk business areas.

## Course Objectives

Upon completion of this 4½-day seminar, the participant will, at a minimum, have

- A working knowledge of anti-money laundering and counter-terrorist financing terminology
- An overall understanding of the key risks associated with money laundering and the impact on the bank's overall risk management
- A familiarity with examination procedures utilized to review high-risk areas, as well as the bank's internally published anti-money laundering program and procedures
- An understanding of the roles of the risk manager and compliance officer within the environment of the bank
- An ability to apply anti-money laundering examination concepts consistently among different-sized banks



# Bank Analysis and Examination School

## Type of Participant Targeted

Bank Analysis and Examination School is designed for individuals with approximately 12 to 18 months of relevant experience. Attendees are typically involved in risk-focused supervision, risk management processes, bank examination, loan classification, and surveillance.

## Prerequisites

None.

## Course Overview

This is an intensive course based on risk management and analytical concepts that apply to all areas of supervision: examinations, inspections, surveillance, and applications. The program emphasizes risk-focused examination and its products as well as common analytical and supervisory themes and techniques.

## Course Objectives

Upon completion of this one-week course, the participant will, at a minimum, be able to

- Discuss and apply risk-focused examination techniques to a bank
- Analyze the financial condition of a bank using the Uniform Bank Performance Report (UBPR)
- Use information from a bank examination report and a UBPR to prepare and present an analysis of a bank's condition
- Understand the CAMELS bank rating system
- Provide an introductory analysis and classification of a loan
- Understand various regulatory and financial topics, including principles of internal controls, information systems, and supervisory strategies

## Curriculum Overview

Subject	Approximate Class Days	Approximate Homework Hours
Risk Management and Risk-Focused Supervision	1.00	1–2
Bank Financial Analysis	2.00	6–7
Credit Analysis and Credit Classifications	1.00	2–3
Final Examination & Group Report	1.00	3–4
TOTALS	5.00	12–16



# Consolidated Supervision and Risk Integration Seminar

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## Type of Participant Targeted

The Consolidated Supervision and Risk Integration Seminar is designed for participants who are familiar with risk-focused supervision and have five or more years of supervision and regulation experience. The curriculum provides a conceptual framework and practical examples of supervisory tools and techniques that help a supervisory team “roll-up” various risk exposures and evaluate a banking organization on a consolidated basis. The seminar provides supervisors with (1) practical bank examination techniques to evaluate enterprise-risk management and (2) exposure to analyzing the financial strength of a consolidated organization.

## Prerequisites

This seminar does not have a pre-course assignment. However, participants are strongly encouraged to familiarize themselves with the case study materials prior to the seminar.

## Course Overview

This 4½-day seminar is an interactive workshop that includes lectures, discussion sessions, and small group case study work to provide participants with an overview of consolidated supervision analysis. Lectures will address the review of enterprise-risk management of important risk categories. Group work will take the form of a case study and give participants an opportunity to practice and reinforce the techniques discussed during the lectures. The curriculum recognizes that each participant arrives with unique risk-focused supervision experiences and examination skills. The seminar is intended to build on these experiences and skills to integrate various risk exposures into a consolidated assessment of a large banking organization. Participants will benefit by learning from the application of “real world” experience to a stylized case study.

## Course Objectives

Upon completion of this 4½-day seminar, the participant will, at a minimum, be able to

- Recognize and analyze desirable corporate governance and risk control functions
- Recognize risk identification and reporting mechanisms, and build an organization-wide risk assessment
- Incorporate stress testing results plus capital and liquidity adequacy and planning procedures into an organization-wide risk assessment
- Integrate risk assessments of individual risk disciplines into a consolidated risk assessment of a large banking organization

# Consolidated Supervision and Risk Integration Seminar

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## Curriculum Overview

<b>Subject</b>	<b>Approximate Class Days</b>
Environmental Assessment	.25
Consolidated Supervision and Risk Integration	.50
Consolidated Accounting	.25
Corporate Governance and Enterprise-Risk Management	.50
Enterprise-Risk Management	1.50
Consolidated Entity Evaluation	1.00
Risk Integration and Consolidated Evaluation	.50
TOTAL	4.50

# Credit Risk Analysis School

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## Type of Participant Targeted

Credit Risk Analysis School is a course designed for individuals with one to three years of supervision and regulation experience. The curriculum provides an introductory learning experience designed to provide a basic set of credit analysis and examination skills that are applicable to the asset quality review function. The typical student will (1) have bank examination experience, (2) have been introduced to loan analysis, and (3) have participated in the examination of loan portfolios during the examinations or inspections of several financial institutions.

## Prerequisites

The pre-course assignments consist of a self-instruction module, reading assignments, and an accounting quiz. The pre-course assignments will take approximately 40 hours to complete. The accounting quiz is collected on the first day of class and counts towards the final course grade.

## Course Overview

This one-week school is composed of a workshop on basic financial statement analysis and cash flow analysis, loan underwriting case studies, and loan grading exercises. Homework assignments will take approximately eight hours.

The curriculum recognizes that, while the fundamentals of extending credit are similar for all types of lending activities, their application may differ to meet the needs of specific credit transactions. This course gives the participants a systematic strategy for analyzing credits. Participants will benefit by learning analytical skills and applying those skills to actual loan case studies. It is expected that significant additional on-the-job training, experience, and academic opportunities will be necessary to develop a graduate of the Credit Risk Analysis School into a fully competent loan examiner.

## Course Objectives

Upon completion of this one-week course, the participant will, at a minimum, be able to

- Identify and analyze the borrowing causes for a loan and determine the proper loan structure and pricing for the risk
- Analyze both business and personal income statements and balance sheets for strengths and weaknesses, and cash flow for loan repayment ability
- Analyze loan documentation for content, completeness, and efficiency
- Analyze the credit risks in personal and business loans of moderate complexity
- Classify loans according to regulatory classification definitions
- Identify the factors to consider when managing a problem loan



# Liquidity Risk Management Seminar

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## Type of Participant Targeted

The Liquidity Risk Management Seminar is designed to prepare market and liquidity risk bank examiners to assess and evaluate the liquidity risk management practices of financial institutions.

## Prerequisites

Participants should have a general understanding of the background of liquidity risk. Participants are also strongly encouraged to review the pre-course material.

## Course Overview

This one-week seminar will provide an in-depth exposure to liquidity-risk management concepts and methodologies, such as cash flow modeling, stress testing, and international regulatory requirements. The topics covered will enable participants to identify and assess liquidity-risk issues present at most financial institutions, including funding vulnerabilities, asset liquidity value, roll-over risk, funding liquidity risk, market-based liquidity risk, intraday liquidity risk, and contingent liquidity risk. This program will include case study work to illustrate and reinforce the concepts presented in the lectures.

## Course Objectives

This program is designed to familiarize the participants with the current issues in liquidity-risk management, including

- Collateral management
- Liquidity cash flow modeling
- Contingency funding plans
- Stress testing
- Intraday liquidity risk
- Regulation of financial market utilities
- Liquidity risk impact of trading on exchanges versus over-the-counter trading
- Liquidity issues related to repurchase agreements, covered bonds, and securitization

In addition, the course will address the ramifications of new developments in supervision and regulation, such as

- The Dodd-Frank Wall Street Reform and Consumer Protection Act
- Basel III



# Market Risk Analysis Seminar

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## Type of Participant Targeted

Market Risk Analysis Seminar (MRAS) is a course designed for individuals with one to three years of supervision and regulation experience. The curriculum is designed to provide the basic set of examination skills needed to understand and provide supervisory oversight of a financial institution's trading book. The typical participant will have experience with (1) bank examinations, (2) the analysis of financial institutions, and (3) the examination of investment portfolios and treasury activities during the examination or inspection of financial institutions.

## Prerequisites

Participants should be familiar with financial derivatives (futures, forwards, swaps, and options) and financial math. They should also have a basic understanding of trading activities. Participants will receive a pre-seminar reading assignment, "Review of Basic Math and Financial Concepts," to determine their familiarity with the concepts covered. In addition, they will receive background papers on related topics as supplementary review materials.

## Course Overview

MRAS provides an overview of trading market risk management, including the products used to manage market risk in the trading book, counterparty credit risk management, and the value-at-risk (VaR) measurement method. The course provides participants with a systematic strategy for analyzing market risk in the trading book. The course is a combination of lectures on technical risk management topics and short case studies that apply the concepts studied. Fully qualified participants will not require any pre-course study, although background papers on various subjects are provided if participants wish to review basic concepts.

## Course Objectives

At the end of this one-week seminar, the participant will, at a minimum, be able to

- Describe the elements of sound internal controls and risk management systems for a bank's trading book
- Discuss investment and derivative products and understand the components of market risk that can be controlled through the use of on- and off-balance-sheet instruments
- Describe market organization, regulation, and emerging issues in the derivatives market
- Discuss the significance of credit risk management for trading activities
- Describe the VaR method as it relates to trading activities and portfolio management
- Discuss the tools commonly employed to identify, measure, monitor, and control market risk
- Discuss the incentives for securitization, the major types of securitized assets, and the risks and regulatory considerations when a bank begins securitization activities
- Describe the basic accounting concepts and methods for derivative instruments from an international accounting standards perspective



# Operational Risk Assessment Seminar

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## Type of Participant Targeted

This program is for examiners with 12 to 24 months of field examination experience.

## Prerequisites

Participants will receive a pre-seminar reading assignment that prepares them for case study group work during the seminar. This assignment will take approximately four hours to complete.

## Course Overview

This seminar is designed to provide examiners and supervisory staff with an understanding of supervisory guidance regarding operational risk and risk management principles; a practical understanding of key risks inherent in core banking activities, management controls, and risk-mitigation techniques; and a fundamental understanding of the approaches to and challenges of quantitative analysis of operational risk. The seminar is also designed to provide a framework for assessing risk, evaluating risk management, and crafting an appropriate supervision and examination strategy. The seminar also includes a basic introduction to issues and quantitative analytical considerations relevant to Basel II operational risk capital allocation.

## Course Objectives

After completing this one-week training program, the participant will, at a minimum, be able to

- Understand and discuss the current supervisory guidance on operational risk management and the implications for supervised institutions
- Identify, document, and evaluate inherent risk in a variety of core banking activities
- Assess the interdependency and enterprise-wide impacts of operational risks and the overall risk profile of financial institutions
- Review and evaluate organizational frameworks, as well as individual internal controls and risk mitigants for managing operational risk
- Assess the quality of enterprise-wide operational risk management, including compliance/legal risks
- Understand key concepts in the quantitative analysis of operational risk for Basel II capital calculation
- Develop an appropriate supervisory strategy and examination plan



# Principles of Asset/Liability Management Seminar

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## Type of Participant Targeted

The Principles of Asset/Liability Management (PALM) Seminar is designed for safety and soundness bank examiners. It should be taken in examiners' careers when they begin to assess and evaluate asset/liability management (ALM) activities and the market-risk sensitivity of financial institutions as a part of their routine job function.

## Prerequisites

Participants should have a general understanding of intermediate financial concepts—similar to that achieved in junior or senior level economics and finance classes. This background should include familiarity with futures, forwards, swaps, and options; duration; and intermediate balance sheet analysis. Participants are encouraged to check their proficiency by reviewing the background papers provided as pre-course supplementary course materials. Also suggested is a review of the STaRT Asset Liability Management Module (see pages 11–12).

## Course Overview

PALM provides an in-depth exposure to ALM, concepts, and methodologies as they apply to a financial institution's banking book—non-trading assets and liabilities. (Trading assets are addressed in a companion class, the Market Risk Analysis Seminar.) The materials covered in PALM will enable participants to identify and draw conclusions about interest rate, investment, and liquidity-risk issues they will encounter while examining financial institutions. The course contains a case study based on an intermediate-sized U.S. commercial bank. The case study is used to illustrate and reinforce the balance sheet ALM concepts presented in the lectures. This 4½-day course has no pre-course work, although background papers on various subjects are provided.

## Course Objectives

This program is designed to give participants a broad overview of the basic principles of ALM, including

- Interest-rate risk
- Investment portfolio management
- Liquidity risk
- Balance sheet hedging
- ALM model risk

The class will also provide participants with a basic understanding of

- How financial markets determine interest rates
- How changes in interest rates can affect the risk posture and profitability of financial institutions
- What tools are available to measure an institution's interest-rate risk and liquidity exposures
- Why and how institutions use certain products to manage their interest-rate risk and liquidity exposures



# Real Estate Lending Seminar

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## Type of Participant Targeted

Real Estate Lending (REL) is a seminar designed for participants whose typical job assignments involve the credit-quality evaluation of loan portfolios. The typical participant will have some exposure to real estate credits, along with three to five years of regulatory experience.

## Prerequisites

Participants must have completed the *Credit Risk Analysis School* and preferably be commissioned safety and soundness examiners or have equivalent experience with other regulatory agencies or banking departments. There is a pre-course reading assignment that requires approximately three hours to complete.

## Course Overview

REL is designed to provide a systematic approach to analyzing real estate acquisition, development, and construction lending facilities. This course reviews various types of real estate projects and the unique risks associated with each. Topics likely to be addressed include real estate underwriting standards, developer cash flow analysis, appraisals and appraisal policy guidelines relating to different types of real estate financing, real estate-related accounting issues, problem real estate loan management, classification standards and issues, and local economic conditions affecting real estate lending. REL is an interactive seminar, where participants are encouraged to share relevant experiences and contribute to classroom discussions and case studies.

## Course Objectives

Upon completion of this 4½-day seminar, the participant will, at a minimum, be able to

- Evaluate the most important risks inherent in common types of real estate projects
- Determine critical due diligence requirements for various real estate loans, including environmental audits, project feasibility studies, plan and budget reviews, and other relevant documentation
- Differentiate the valuation methods and analyze the key elements of a real estate valuation, as well as determine whether the appraisal reports meet applicable requirements
- Analyze the likely adequacy of real estate loan repayment sources, including those related to the borrower, project, and guarantor
- Assess real estate loan policies to determine if they comply with relevant policy statements and guidelines

# Real Estate Lending Seminar

## Curriculum Overview

Subject	Approximate Class Days	Approximate Homework Hours
Types of commercial real estate	.50	
Risks inherent in real estate lending (with case)	2.00	
Real estate underwriting standards (with case)	1.00	
Due diligence considerations	.50	.50
Analyzing real estate developer cash flows (with case)	6.00	
Appraisals: the valuation process	1.00	.50
Elements of an appraisal and valuation methods	1.00	
Introduction to appraisal review	3.00	1.00
Appraisal review (with case)	2.00	
Appraisal regulations, guidelines, policies, and procedures	2.00	
Financing and appraising various real estate projects	3.50	
Real estate accounting issues (with case)	1.50	
Problem real estate loan management (with case)	3.00	
Economic indexes and real estate development	1.50	
System supervisory and policy issues related to real estate lending	1.50	
TOTALS	30.00	2.00

# Risk Management and Internal Controls Seminar

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## Type of Participant Targeted

This program is for all examiners with more than six months of field examination experience.

## Prerequisites

None.

## Course Overview

The course is designed to provide examiners with an understanding of the importance of internal controls and risk management in banks, and how the review of internal controls and risk management fits into the overall bank rating assessment. The course is also intended to give examiners guidance on assessing the risk management and internal control environment in key functions such as credit administration and investments, including trading operations, deposits, and payment systems risk.

## Course Objectives

Upon completion of this 4½-day seminar, the participant will have

- Gained an overall understanding of key risk management and internal control concepts
- Understood the role of internal and external audits and the internal control environment in a bank
- Become familiar with the role of information technology in banking institutions and the general risk factors and control areas
- Developed examination skills for assessing the risk management and internal control environment of banks in such areas as lending function management and operating areas (funds transfer, trading and investments, trade finance/letters of credit, etc.), resulting in the assignment of an internal control rating
- Developed the ability to apply risk management and internal control examination concepts consistently among banks



# Technology Risk Supervision Seminar

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## Type of Participant Targeted

The Technology Risk Supervision Seminar is an intermediate-level course designed primarily for information technology (IT) examiners. The seminar is also appropriate for safety and soundness examiners who are exposed to IT-related issues during examinations and who have a basic understanding of IT concepts, supervision, and risks for financial institutions.

## Prerequisites

None.

## Course Overview

The goal of this 4½-day seminar is to provide training in IT supervision of financial institutions.

## Course Objectives

The course builds on foundational concepts of networks and operating systems and covers applied topics of risks including system management, controls, data management, and emerging technologies. At the conclusion, participants should be able to

- Recognize and understand more advanced concepts of bank technology and architecture
- Identify business and supervision risks related to a financial institution's IT environment
- Assess the impact of identified risks on the institution's operations
- Discuss examination results and concerns with the financial institution's management
- Analyze and assess the impact of the risks and exposures of existing and emerging technologies including, but not limited to virtualization; network, security and log management solutions; "Bring Your Own Device (BYOD)"; cloud computing; vendor management; data loss prevention; mobile devices, payments, and risks; and social media risks
- Make relevant control recommendations to the financial institution's management

## Post-Course Intervention

After completing the Technology Risk Supervision Seminar, the participant should be given on-the-job IT assignments that will increase the retention of the competencies presented during class. Such on-the-job assignments include

- Completing the evaluation and identifying key risks of a non-complex financial institution's IT environment with the assistance of a more senior IT examiner
- Preparing, or assisting in the preparation of, examination findings concerning a financial institution's technology risks
- Conducting or participating in a discussion with bank management regarding IT examination findings and concerns

# Technology Risk Supervision Seminar

## Curriculum Overview

Subject	Approximate Class Hours	Learning Objectives
Course Overview, Risk Management Framework, IT Audit and Exam	1.25	<ul style="list-style-type: none"> <li>• Fundamental concepts of risk management</li> <li>• Framework for IT audits and exams</li> </ul>
IT Governance and Risk Assessment	1.25	<ul style="list-style-type: none"> <li>• Difference between risk assessment and management</li> <li>• Methodology, structure, and approach for IT Governance</li> <li>• How to conduct and evaluate a risk assessment</li> </ul>
Network Concepts, Security, and Design	1.50	<ul style="list-style-type: none"> <li>• Open Systems Interconnection (“OSI”) Model</li> <li>• Specific risks related to networks</li> </ul>
Network Diagrams, Firewalls, and other Controls	1.25	<ul style="list-style-type: none"> <li>• Elements of layered security and network devices to separate zones of risk</li> <li>• Firewall controls, monitoring, and management</li> </ul>
Operating Systems: Introduction, Role, and Directories	1.75	<ul style="list-style-type: none"> <li>• OS security parameters relative to Enterprise-wide Active Directory implementation</li> <li>• Use of Group Policy to enforce Access Controls</li> </ul>
Operating Systems: Servers and Clients	1.50	<ul style="list-style-type: none"> <li>• Overview of security similarities and differences across multiple OS platforms</li> </ul>
Virtualization and Bring Your Own Device (“BYOD”)	2.75	<ul style="list-style-type: none"> <li>• Concepts of virtualized systems</li> <li>• Impact of BYOD on traditional infrastructures</li> </ul>
Security Threat Vectors and Vulnerability Management	1.25	<ul style="list-style-type: none"> <li>• Most common threat vectors impacting banks</li> <li>• Elements and role of a vulnerability management and penetration testing program</li> </ul>
Security: Patch Management	1.50	<ul style="list-style-type: none"> <li>• Patch management terminology, process, and tools</li> </ul>
Security: Change Management, Data Integrity, and Data Loss Prevention	1.50	<ul style="list-style-type: none"> <li>• Identification and classification of an organization’s information and data stream</li> <li>• Preventing the loss of sensitive information in a security breach</li> <li>• Different phases of change management and assessment of key controls</li> </ul>

# Technology Risk Supervision Seminar

## Curriculum Overview

Security Information and Event Management (“SIEM”)	1.25	<ul style="list-style-type: none"> <li>• Using all IT information sources to facilitate successful security monitoring</li> <li>• Link between log/information monitoring and incident response planning</li> </ul>
Cloud Computing and Vendor Management	1.25	<ul style="list-style-type: none"> <li>• Technical controls for managing cloud computing risks</li> <li>• Assessing the vendor risk matrix and cloud vendor’s security and compliance capabilities</li> </ul>
Business Continuity Planning and Disaster Recovery	1.50	<ul style="list-style-type: none"> <li>• Best practices for disaster recovery planning, testing, and implementation</li> </ul>
Mobile Topics Overview, Mobile Banking/Payments, Authentication	2.75	<ul style="list-style-type: none"> <li>• Mobile payment risks and mechanisms for limiting this risk</li> </ul>
Social Media and Risks	1.25	<ul style="list-style-type: none"> <li>• Exposures and risks involved with social media applications and strategies for mitigating those risks</li> </ul>
TOTAL	24.75	



# Joint Banque de France International Banking and Finance Institute/Federal Reserve System – “Seminar on Credit Risk Assessment and Control”

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## Type of Participant Targeted

This program, to be held in Paris jointly with the Banque de France International Banking and Finance Institute (IBFI), is designed for supervisory officials and staff from French speaking countries who have more than three years of relevant field experience and have participated in on-site or off-site examinations of banks. The lectures will be conducted simultaneously in English and French.

## Course Overview

This course will cover the definition of credit risk, the Basel rules for credit risk, credit risk management (including risk-adjusted return on capital and portfolio management), credit risk off-site and on-site control, rating systems, stress testing, and implementation by banks and validation of advanced systems.

## Course Objectives

This 5-day seminar is designed to

- Broaden participants’ knowledge of credit risk management
- Give a practical view of credit risk management through case studies
- Detail the process for identifying and measuring critical risk areas
- Familiarize participants with examination techniques
- Enable participants to develop a final risk profile and identify appropriate supervision tools

## Contact for Further Information and Registration

Mr. Jean-Luc Quemard: e-mail: [jean-luc.quemard@banque-france.fr](mailto:jean-luc.quemard@banque-france.fr)

Ms. Chantal Gadroy: e-mail: [chantal.gadroy@banque-france.fr](mailto:chantal.gadroy@banque-france.fr)



# Joint International Monetary Fund/World Bank/ Federal Reserve Board – “Seminar on Policy Challenges for the Financial Sector”

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## Type of Participant Targeted

This 3-day program is designed for senior level officials from around the world who hold key positions in the financial sector. These officials generally are governors, deputy governors, heads, or deputy heads of banking supervisory authorities, or high-level staff involved in, or capable of influencing, policy formulation as it concerns the supervision and regulation of banks in their respective countries.

## Program Overview

The program aims to provide policymakers a forum for identifying, developing, and challenging responses to strategy and policy issues. It explores current policy issues, disseminates research in the financial sector, and creates awareness of financial sector issues discussed in international forums.

Presentations serve as a setting for extensive discussions and exchanges of experiences among the participants. Debates will encompass major economic, legal, and institutional strategies and policies that are necessary to ensure that appropriate regulatory and prudential safeguards are in place to support sound and sustainable economic growth.



# Joint International Monetary Fund/World Bank/ Federal Reserve System – “Financial Crimes Detection Workshop”

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## Type of Participant Targeted

This program is designed for bank examiners, regulators, investigators, auditors, accountants, ethics and compliance officers, financial and risk analysts, and financial intelligence unit personnel working in the public sector who wish to acquire knowledge or refresh their skills on concepts, issues, trends, and developments relating to a broad array of financial crimes, including corruption, bank fraud, and money laundering, and techniques for tracing and recovering assets and for detecting and investigating financial crimes.

## Prerequisites

Participants should have a minimum of 18 months of relevant work experience. This program has an online pre-course reading assignment.

## Course Overview

Experienced instructors from all three sponsoring institutions will introduce participants during this 4½-day program to the most common financial crimes, and familiarize them with relevant regulatory schemes and frameworks. Participants will learn the most up-to-date techniques for establishing anti-money laundering and illicit asset recovery programs, and for detecting and investigating corruption and fraud. Using a combination of case studies, presentations, videos, and hands on exercises through group work, the course seeks to enhance participants’ analytical proficiency; examination, investigation, and detection techniques; and knowledge of financial crimes.

## Course Objectives

Upon completion of this 4½-day course, the participant will, at a minimum, have

- A familiarity with global and regional anti-corruption and anti-money laundering treaties, conventions, laws, and frameworks.
- A working knowledge of how to establish effective anti-money laundering and asset identification and recovery programs.
- An understanding of the red flags of bank fraud and the most recent or prevalent types of financial sector fraud and money laundering schemes.
- A familiarity with how investigators and analysts detect and trace the flow of ill-gotten gains; how they map the money trail and the actors involved in fraudulent schemes; and how they gather evidence for a successful prosecution, enforcement action, or recovery of stolen assets.



# Joint International Monetary Fund/World Bank/ Federal Reserve System – “Seminar for Senior Bank Supervisors from Emerging Economies”

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## Type of Participant Targeted

This seminar is designed for senior bank supervisors from emerging economies. These supervisors generally are directors of bank supervision, deputy heads of supervision, or high-level staff involved in, or capable of influencing, policy formulation as it concerns the supervision and regulation of banks in their respective countries.

## Program Background

In its work in emerging economies, the experiences of the World Bank and the IMF suggest that macroeconomic reforms will be ineffective or counterproductive when a country’s financial system is in distress. This occurs because a significant part of the resources that are mobilized by the banking system is used to carry problem borrowers rather than used for loans to productive users of credit. Unless contained by strong prudential regulation and effective accounting policies, the bad portfolio grows until insolvency leads to illiquidity, and the central bank must intervene as lender of last resort. In such cases, the collapse of several smaller banks or of a large bank may cause the sudden contraction of the money supply, the failure of the payment system, and severe dislocations in the real economy. Such a collapse may also create real or implicit obligations on the part of the government, as guarantor of depositors and the lender of last resort. The failure of any bank, no matter how small, may lead to contagion and loss of confidence in the system unless the government can demonstrate its ability to handle bank failures in an orderly and systematic fashion. For these reasons, strong and effective bank supervision and prudential regulation is considered critical if the financial health of an emerging country’s banking system is to be restored and/or maintained.

## Program Objectives

The objectives of the seminar are

- To familiarize participants with the supervisory problems faced by emerging economies and the constraints such problems pose to economic growth and development
- To discuss alternative solutions for dealing with banking insolvency and financial system distress through deposit insurance schemes and bank restructuring
- To upgrade the technical skills of bank supervisors

At the conclusion of this seminar, participants will, at a minimum, be able to

- Improve supervision and examination capabilities
- Understand the implications of a financial crisis and the alternatives for restructuring banks
- Gain a better understanding of regulations affecting banking institutions and achieve a greater awareness of major regulatory and supervisory topics being discussed at the international level

# Joint International Monetary Fund/World Bank/ Federal Reserve System – “Seminar for Senior Bank Supervisors from Emerging Economies”

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## Program Overview

Strong and effective bank supervision and prudential regulation are cornerstones of a healthy financial system. Since the 1980s, nearly every financial sector adjustment operation undertaken by the World Bank and the IMF has included a component for strengthening bank supervision and prudential regulation. Traditionally, in most countries, highly specialized bank supervision and examination skills have been learned on the job, with only the largest, most developed countries having the resources to establish training departments and courses. Training, to the extent that it has been conducted in emerging economies, has been narrow in focus.

This seminar will attempt to overcome some of these shortcomings by bringing together a group of participants from a wide variety of countries. The program will focus on discussions of the principal policy issues facing bank supervisors in developing countries today. It will establish the linkages between financial system health and macroeconomic performance and the World Bank’s general framework for financial sector reform. From these broader issues, the seminar will move to discussions concerning the causes of financial system distress and possible solutions, including problem bank resolution and bank restructuring.

World Bank and IMF staff, and a distinguished group of experts from the U.S. bank supervisory agencies, major international accounting firms, and elsewhere, will lead the discussions. Class participation and interaction will be encouraged.

The seminar will also focus on skills development. Speakers from the Federal Reserve System, the World Bank, the IMF, the Bank for International Settlements, the Toronto Centre, and the Financial Stability Institute, among others, will discuss many aspects of supervisory and regulatory best practices, including implementation road maps and challenges. Other topics may include loan portfolio management, credit risk, classification of assets, bank analysis, foreign exchange risk, market risk, interest-rate risk, the CAMELS rating system, risk-focused examination techniques, and internal and external auditing. The topics will be presented using a combination of lectures, class discussions, case studies, group exercises, and class presentations. Once again, class participation and interaction will be encouraged as an effective means of sharing ideas and learning. This seminar will continue the process of providing technical assistance to emerging economies.

**S.T.R.E.A.M.  
Technology Lab  
Federal Reserve Bank of Chicago**

**Course Descriptions**





The Board of Governors of the Federal Reserve System is proud to offer technology-related courses developed and hosted by the S.T.R.E.A.M./Technology Lab at the Federal Reserve Bank of Chicago, Chicago, Illinois. For over ten years, the S.T.R.E.A.M./Technology Lab has pursued a unique approach to examiner technology training by combining lectures with hands-on exercises. The exercises reinforce concepts by allowing participants to input commands into software applications and observe how they work. The Technology Lab is outfitted with many applications and operating systems found in the financial industry.

A selection of these 4½-day courses is being offered to international participants. The targeted participant is an examiner responsible for technology risk supervision, but who may not have had university training in information technology.



# Information Systems Vulnerability Management

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## Type of Participant Targeted

The Information Systems Vulnerability Management course is a one-week course intended for examiners with IT examination responsibilities but who may not have had university training in information technology. At least one year of field examination experience is preferred.

## Prerequisites

None.

## Course Overview

This course provides participants with a technical grounding in networking concepts and technologies that are critical to IT operations in financial institutions, including TCP/IP networking protocols and common network infrastructures and configurations. The course examines key network perimeter security tools, including firewalls and intrusion detection systems.

## Course Objectives

After completing the course, the participant, at a minimum, will be able to

- Recognize where and how vulnerability management fits in with the bank's overall information security program and IT operations
- Identify the role a vulnerability management program has in safeguarding information and assets
- Assess the adequacy of a patch management, vulnerability scanning and assessment, and penetration testing tools and their limitations
- Evaluate the adequacy of an organization's testing program
- Recognize key elements of an incident response program
- Discuss key technology terms related to information systems vulnerability management
- Assess the key risks, controls and processes in a supervisory context, including regulatory compliance issues
- Identify what the financial institution must do to respond to new threats

## Post-Course Intervention

Participants will learn the essential components of a sound vulnerability management program. The bank must position vulnerability management as an integral part of the enterprise-wide information security program, network engineering, and IT operations. Other key elements include, asset inventory, risk assessment, monitoring for vulnerabilities, patch management, vulnerability testing, security intelligence, incident response, forensics, and the relationship of vulnerability management to regulatory compliance.

# Information Systems Vulnerability Management

## Curriculum Overview

Topic/Activity	Approximate Class Hours
General Information Security concepts	1.00
SQL Injection—Case Study	3.00
Risk Mitigation	3.00
Network mapping and vulnerability scanning—Exercise	1.00
Sources of Security Intelligence (review of CVE and Bugtraq)	0.50
Assessing the Patch Status of the Bank—Case Study	1.00
Patch Management Operations—Demonstration	1.00
Testing—Validating the Effectiveness of Patch Management	1.00
Inventory and Asset Identification—Demonstration	0.50
Update on the Latest Threat Vectors (e.g., Zeus)	0.50
Penetration Testing & Vulnerability Assessment—Case Study	1.50
Penetration Testing & Vulnerability Assessment—Demonstration	0.50
Monitoring of Network Traffic and Password Capture—Exercise	1.00
Other Monitoring and Enumeration Tools—Exercise	1.00
Incident Response	1.00
When Banks Must Notify Customers—Case Study	1.00
Incident Response Resources and Regulatory Guidance	2.00
Security Information and Event Management—Demonstration	2.00
Supervisory Concerns	1.50
Responding to New Threats—Capstone Exercise	1.00
TOTAL	25.00

## Learning Objectives

Examiners should be able to articulate the key elements associated with operating and managing a vulnerability management program. This starts with having an accurate inventory of all assets (servers and applications) that communicate over the network. Accuracy in this case means that consideration should be given to potential risks for each system (internal and external) and that all systems should be inventoried. It includes having an accurate risk assessment and relies on configuration management. Configuration management is critical as this requires operational discipline regardless of institution size. Finally, the financial institution must be able to articulate a risk-mitigation strategy; this should be reviewed to ensure that new applications and/or systems are treated from a holistic perspective, and that controls for all systems are re-evaluated for effectiveness periodically.

# Information Systems Vulnerability Management

## By module, participants will accomplish

Module	Learning Objectives
General Information Security Concepts	<ul style="list-style-type: none"> <li>• Foster a baseline understanding of key terms related to vulnerability management</li> </ul>
SQL Injection—Case Study	<ul style="list-style-type: none"> <li>• Identify the technical elements required for an attacker to exploit a web server</li> <li>• Examine the controls that must be in place to mitigate SQL injection attacks</li> <li>• Review the bank’s response and identify changes that would have facilitated a quicker recovery</li> </ul>
Risk Mitigation	<ul style="list-style-type: none"> <li>• Identify why vulnerabilities are a concern to the financial institution regardless of size and complexity</li> <li>• Discuss vulnerability monitoring and patching</li> <li>• Identify the role of vulnerability assessments in the risk management process</li> <li>• Describe security intelligence</li> <li>• Evaluate vulnerability management tools</li> </ul>
Patch Management	<ul style="list-style-type: none"> <li>• Define patch management terminology</li> <li>• Discuss the criticality of applying patches in a timely manner</li> <li>• Enumerate the risks of ineffective patch management</li> <li>• Evaluate patch management deployment tools</li> <li>• Describe the patch process and demonstrate using a commercial tool</li> </ul>
Penetration Testing and Vulnerability Assessment (Case Study and Demonstration)	<ul style="list-style-type: none"> <li>• Illustrate the relationship between configuration management, change management, and release management</li> <li>• Identify how poor configuration management practices can lead to vulnerabilities</li> <li>• Demonstrate how vulnerability assessment differs from penetration testing and what are the success criteria for each</li> </ul>
Incident Response	<ul style="list-style-type: none"> <li>• Define the goals and definitions of Incident Response (IR)</li> <li>• Describe the IR Life-Cycle, IR Planning, and the IR teams and stakeholders</li> <li>• Evaluate customer notification requirements and other regulatory guidance</li> </ul>

## Instructors

Information Systems Vulnerability Management courses include one or more instructor(s) from the Federal Reserve System and may also include instructors from an external agency.



# IT Supervisory Themes and Emerging Topics

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## Type of Participant Targeted

IT Supervisory Themes and Emerging Topics (STET) is a one-week course. The course is suitable both for newer examiners looking for some introduction to various IT topics, and experienced examiners who have encountered these issues and could benefit from further collaboration with other examiners.

## Prerequisites

None.

## Course Overview

This course is designed to highlight emerging topics in information technology in a condensed and discussion-oriented format. Topics include virtualization overview, virtualization work program, cloud computing, cloud computing vendor management, social media risks and controls, mobile banking and risk assessment, “bring your own device (BYOD),” the Federal Reserve’s supervisory guidance letter #11-9 concerning authentication in an internet banking environment, and data leak prevention. The class modules are dynamically developed based on evolving IT operational risks and newfound IT exam issues. Therefore, each class may have different focus areas based on latest IT trends.

## Course Objectives

Upon completion of this course, the participant, at a minimum, will be able to

- Demonstrate a basic understanding of IT technology
- Identify strengths and weaknesses of various technologies
- Perform fundamental system administration and audit operations
- Evaluate and report efficiency of various security controls to protect technology operations

## Post-Course Intervention

Participants should be provided with opportunities that allow them to identify security capabilities and limitations associated with computer operating systems within a financial institution. They should review security measurements and recommend proper security controls to protect technology operations.

# IT Supervisory Themes and Emerging Topics

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## Curriculum Overview

Subject	Approximate Class Hours
Virtualization Overview	2.0
Virtualization Work Program	3.0
Cloud Computing	3.0
Cloud Computing Vendor Management	4.0
Social Media Risks and Controls	4.0
Social Media Hands-on Lab	1.0
Data Leak Prevention	2.0
Mobile Banking Risk Assessment Case Study	2.0
SR 11-9 Authentication in an Internet Banking Environment	2.0
Bring Your Own Device	2.0
TOTAL	25.00

\* Note: The topics and hours may vary from class to class.

## Learning Objectives

Participants develop a solid understanding of various technologies and identify security strengths and weaknesses in an institution's technology environment. Furthermore, participants evaluate the technology and its security measurement by reviewing, auditing, reporting, and recommending proper security controls.

# IT Supervisory Themes and Emerging Topics

**By module, the following learning objectives will be accomplished:**

Module	Learning Objectives
Virtualization Overview	<ul style="list-style-type: none"> <li>• Explain the basic concept of virtualization</li> <li>• Identify the advantages of server virtualization</li> </ul>
Virtualization Work Program	<ul style="list-style-type: none"> <li>• Explain how to use virtualization work program to conduct virtualization exam</li> <li>• Evaluate the controls and processes in the virtual environment</li> </ul>
Cloud Computing	<ul style="list-style-type: none"> <li>• Explain cloud computing concept</li> <li>• Illustrate various deployment models</li> <li>• Identify security and compliance risks</li> <li>• Evaluate controls to mitigate the risks</li> </ul>
Cloud Computing Vendor Management	<ul style="list-style-type: none"> <li>• Identify the necessary management process and technical controls in the cloud</li> <li>• Review the vendor risk matrix</li> <li>• Assess cloud vendor's security and compliance capabilities</li> </ul>
Social Media Risks and Controls	<ul style="list-style-type: none"> <li>• Understand the social media applications in various forms</li> <li>• List the exposures and risks regarding information security</li> <li>• Recommend the necessary policies, procedures and controls to mitigate the risks</li> </ul>
Social Media Hands-on Labs	<ul style="list-style-type: none"> <li>• Illustrate Internet search with privacy protection</li> <li>• Explain the social channels such as Twitter</li> <li>• Evaluate the management of social media channels</li> </ul>
Mobile Banking Risks and Controls	<ul style="list-style-type: none"> <li>• Review and discuss mobile banking technology</li> <li>• Identify risks and controls</li> </ul>
Mobile Banking Case Study – Risk Assessment	<ul style="list-style-type: none"> <li>• Explain critical areas impacted by mobile banking</li> <li>• Identify financial risks and operational risks associated with mobile banking</li> <li>• Evaluate controls to mitigate the risks</li> </ul>
SR 11-9 Authentication in an Internet Banking Environment	<ul style="list-style-type: none"> <li>• Review the guidelines</li> <li>• Evaluate multi-layer authentication implementations</li> </ul>
Bring Your Own Device	<ul style="list-style-type: none"> <li>• Understand the benefits and risks of BYOD</li> <li>• Recommend the necessary policies, procedures and controls to mitigate the risks</li> </ul>

## Instructors

The STET course is conducted and supported by a diverse group of professionals, including senior IT examiners, information security specialists, technology architects, and program managers from the Federal Reserve System, FFIEC agencies, state banking supervision departments in the United States, and consulting firms.



# Network Security

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## Type of Participant Targeted

The Network Security course is a one-week course intended for examiners with IT examination responsibilities, but who may not have had university training in information technology. At least one year of field examination experience is preferred.

## Prerequisites

None required.

## Course Overview

This course provides participants with a technical grounding in networking concepts and technologies that are critical to IT operations in financial institutions, including TCP/IP networking protocols and common network infrastructures and configurations. The course examines key network perimeter security tools, including firewalls and intrusion detection systems (IDS).

## Course Objectives

After completing the course, the participant, at a minimum, will be able to

- Explore, map, and analyze realistic TCP/IP networks using a variety of diagnostic software tools
- Implement, test, and maintain common firewall types and architectures in a simulated e-banking setting
- Identify different IDS products currently available, effectively implement and manage these systems, and understand the controls needed for maintaining an IDS infrastructure
- Discuss examination procedures outlined in the IT Examination Handbook produced by the FFIEC

## Post-Course Intervention

Participants will learn the essential components of a network. For each technical element (e.g., firewalls and intrusion detection systems), appropriate controls will be reviewed.

# Network Security

## Curriculum Overview

Topic/Activity	Approximate Class Hours
Network Attack Vectors	1.00
Anti-Virus and Spyware Exercises	1.00
Microsoft Baseline Security Analyzer Exercise	1.00
Perimeter Defense: Firewalls	2.00
Password Cracking Exercise	.50
Network Diagramming and Exercises	3.00
Router Exercise	1.00
Wireless Networking and Exercises	1.50
Protocols	.75
Encapsulation and Exercises	2.00
NMap Exercise	.75
Firewalls and Exercises	2.50
Intrusion Detection/Prevention Systems	2.50
IDS/IPS Exercises	2.50
Capstone Discussion and Demonstration	2.50
TOTAL	24.50

## Learning Objectives

Examiners should be able to articulate the key risk elements associated with operating and managing a production network. Good network security starts with an accurate risk assessment. Accuracy in this case means that consideration should be given to potential risks for each system (internal and external) and that all systems should be inventoried. Change management is critical as is ensuring that hosts are hardened according to corporate guidelines. Remote access also needs to be managed to include some form of monitoring and logging. Finally, the financial institution must be able to articulate a risk-mitigation strategy; this should be reviewed to ensure that new applications and/or systems are treated from a holistic perspective, and that controls for all systems are re-evaluated for effectiveness periodically.

# Network Security

## By module, participants will accomplish

Module	Learning Objectives
Network Attack Vectors	<ul style="list-style-type: none"><li>• Identify and understand the technical implications of the latest network attack vectors</li><li>• Assess effectiveness of alternative mitigation techniques</li></ul>
Perimeter Defense: Firewalls	<ul style="list-style-type: none"><li>• Evaluate and assess appropriate implementation of firewall controls relative to the complexity of a given network</li><li>• Use network configuration and sound design of firewall architecture through multiple filter points, active firewall monitoring and management, and integrated security monitoring</li></ul>
Network Diagramming	<ul style="list-style-type: none"><li>• Review the elements of layered security and understand how network devices are used to separate zones of risk</li></ul>
Protocols	<ul style="list-style-type: none"><li>• Illustrate the OSI model by following a packet from encapsulation on one computer to de-encapsulation on another</li><li>• Examine the various protocol characteristics and evaluate the risk associated with using protocols in a production environment</li></ul>
IDPS Systems	<ul style="list-style-type: none"><li>• Distinguish between alert and block versus alert and pass strategies</li><li>• Identify sound practices associated with current state-of-the-art intrusion detection and prevention system devices</li></ul>

## Instructors

Network Security courses include one or more instructor(s) from the Federal Reserve System and may also include instructors from an external agency.



# Operating Systems

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## Type of Participant Targeted

The Operating Systems course is a one-week course intended for examiners with IT examination responsibilities, but who may not have had university training in information technology. At least one year of field examination experience is preferred.

## Prerequisites

None.

## Course Overview

This course focuses on the security capabilities and limitations of computer operating systems (OS), including network OS, virtual machines, the Microsoft OS family (including Windows 2008 server, Vista, Windows 7, and Windows 8), the UNIX/Linux operating system family, and IBM's AS/OS/400. Hands-on exercises use virtualized or native environments. Class activities include reviewing security parameters and permissions on various platforms.

## Course Objectives

Upon completion of this course, the participant, at a minimum, will be able to

- Describe the typical uses of different operating systems in the enterprise and how they interact with other components of an organization's core IT infrastructure
- Perform fundamental system administration and audit operations
- Reference U.S. supervisory agency examination work programs
- Perform user administration, access control, auditing, and reporting on various operating systems

## Post-Course Intervention

Participants should be provided with opportunities that allow them to identify security capabilities and limitations associated with OS within a financial institution. They should review security measurements and recommend proper security controls to protect various OS assets.

# Operating Systems

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## Curriculum Overview

Topic/Activity	Approximate Class Hours
OS history and legacy OS	1.50
Operating systems	1.50
Virtualization	8.00
Windows 7 and Windows 8	5.00
Windows security and controls (Windows server 2008/2012)	8.00
Unix/Linux OS	4.00
IBM/OS 400	2.00
Summary	1.00
TOTAL	31.00

## Learning Objectives

Participants build up a solid understanding of various OS functions, features, and their associated security risks through lectures and hands-on exercises. Furthermore, participants evaluate the OS and its security measurement by reviewing, auditing, reporting, and recommending proper security controls.

# Operating Systems

## By module, participants will accomplish

Module	Learning Objectives
Operating Systems Overview	<ul style="list-style-type: none"> <li>• Identify the basics of operating systems</li> <li>• Enumerate the role operating systems play in information technology</li> <li>• Test the functionalities and characteristics of different operating systems</li> </ul>
Unix/Linux	<ul style="list-style-type: none"> <li>• Explain features of Unix and Linux</li> <li>• Identify security strengths and weaknesses</li> <li>• Audit Unix and Linux</li> </ul>
Windows Security and Controls	<ul style="list-style-type: none"> <li>• Explain Windows security concepts</li> <li>• Examine Windows elements, including Windows administrative tools, file systems, process management, registry management, performance monitoring, Microsoft Management Console, active directory, user management, group and share, group policy and account policy, audit, and various Window services</li> <li>• Examine Windows security controls, such as device hardening, security template, and encryption of file system</li> </ul>
Virtual Machine	<ul style="list-style-type: none"> <li>• Gain basic understanding of virtual machine solutions</li> <li>• Explain features in virtualization player</li> <li>• Review virtualization vendors</li> </ul>
Vista, Windows 7, and Windows 8	<ul style="list-style-type: none"> <li>• Describe new options and features in Vista, Windows 7, and Windows 8</li> <li>• Explain new security applications</li> <li>• Consider migration impacts</li> </ul>
Windows Servers	<ul style="list-style-type: none"> <li>• Review features in the latest Microsoft server 2008/2012</li> <li>• Identify new security controls and improvement in user interface</li> </ul>
IBM OS 400	<ul style="list-style-type: none"> <li>• Inspect IBM OS and servers</li> <li>• Explain the management functions, such as log on, screen and operation navigation, and print</li> <li>• Examine system security values, password, user profiles, and group membership</li> </ul>
Network Operating Systems	<ul style="list-style-type: none"> <li>• Explain features of network router, switch, and firewall</li> <li>• Understand roles of network devices</li> <li>• Understand user creation, OS administration, maintenance, and audit</li> </ul>

## Instructors

Operating Systems courses include one or more instructor(s) from the Federal Reserve System and may also include additional instructors from an external agency or consultant firm.



# **Federal Financial Institutions Examination Council Course Descriptions**



# Financial Crimes Seminar

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## Type of Participant Targeted

The Financial Crimes Seminar is offered to commissioned safety and soundness examiners.

## Prerequisites

None.

## Course Overview

The Financial Crimes Seminar provides commissioned examiners with a higher level of knowledge of fraudulent schemes and insider abuses. The seminar is designed to provide insight and information on a variety of current and emerging financial crime-related topics. Presenters may include staff from the U.S. Federal Bureau of Investigation, the Securities and Exchange Commission, the Financial Crimes Enforcement Network, the Department of Justice, and various regulatory agencies. Industry specialists, accountants, and attorneys may also serve as presenters.

Topics vary from year to year based on feedback from prior participants, regulatory changes, and discussions with an interagency development group.

## Course Objectives

Upon completion of this 3½-day seminar, the seminar participants should have a heightened awareness of

- Current financial crimes impacting financial institutions
- Red flags of mortgage fraud
- Potential insider abuse
- Interviewing techniques
- Examiner insights to uncovering fraud
- Current trends in cyber crimes and payment systems risk



# International Banking School

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## Type of Participant Targeted

The International Banking School is a specialized course not intended for all bank examiners. Rather, it is designed for examiners who have supervisory responsibilities for regional or multinational banks that are actively engaged in international banking activities and for U.S. branches and agencies of foreign banks. This course is considered inappropriate for those who do not have international supervisory responsibilities.

## Prerequisites

Examiners who have limited international banking knowledge are required to complete the FFIEC *Basic International Banking Self-Study* course prior to attending this course. This prerequisite may be waived if the participant can demonstrate significant international experience.

## Course Objectives

At the completion of the of the 4½-day course course, a participant will be able to

- Identify key global organizations and their influence on international banking
- Identify current key regulatory and market issues in examining and supervising financial holding companies and banks with international banking activities
- Analyze the major forces driving structural changes in international financial markets and the impact of these changes on the banking community
- Define country macroeconomic and financial risks and identify how they materialize at financial institutions
- Evaluate the role of global rating agencies and their impact on banks' capital adequacy and their capital markets transactions
- Discuss major components of Basel II and III, and their influence on international financial markets
- Identify significant issues in emerging markets and compare and contrast key countries with international banking activities
- Analyze the various types of foreign exchange (FX) spot and derivatives transactions and their risks
- Review trends in accounting frameworks at international financial institutions
- Discuss mechanics of and trends in global loan, debt, and equity issuance underwriting
- Analyze trade finance activities and their risks

## Course Requirements

Participants should complete pre-course assignments sent to them prior to attending the school and bring a calculator capable of calculating present value.



# Payment Systems Risk Conference

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## Type of Participant Targeted

The Payment Systems Risk Conference is intended for commissioned or equivalent tenured field examiners who need a better understanding of the risks associated with payment systems.

## Prerequisites

None.

## Course Overview

The Payment Systems Risk Conference offers an overview of wholesale and retail payment systems and identifies associated risks. The conference provides examiners with knowledge that may be incorporated into the supervisory process. The conference also includes insight into emerging payment processes and technology and their impact on the financial industry. Topics vary from year to year and are selected based on the feedback from prior participants, regulatory changes, and suggestions from an interagency subject matter development group.

## Course Objectives

After attending this 3½-day conference, participants will be able to

- Identify current and emerging risks to payment systems and the impact on the financial industry
- Apply regulatory guidance and industry standards on the assessment and management of retail and wholesale payment systems risk to the supervisory process



# Other Agency Course Descriptions



# The Options Institute

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## Length

Three days.

## Cost

The cost is \$775 per attendee. All participants taking this program are expected to make payment directly to the Chicago Board Options Exchange (CBOE) with a credit card upon arrival.

## Location

The Options Institute is located within CBOE on LaSalle and Van Buren Streets, in Chicago, Illinois.

## Instructors

The faculty consists of traders and members of the financial and academic communities.

## Course Objectives

The Options Institute is the educational unit within CBOE that offers a 3-day seminar on how to use options for risk management. The seminar explains the role of options in modern portfolio management. The curriculum combines lectures, discussions, strategy workshops, and trading floor experience.

Day 1: The first day of the program covers essential options concepts, options pricing theory, and options mechanics. In addition, the role of the Options Clearing Corporation is discussed. Also, options strategies for risk management are discussed as well as the role of market makers.

Day 2: During the second day, the program covers futures pricing and hedging strategies. Also, index options and foreign currency options are discussed. Participants are introduced to options strategies under simulated market conditions.

Day 3: The final day covers regulatory structure and managing risk using interest rate derivatives, as well as a visit to the trading floor. Participants view the trading floor from inside the trading pit and have the opportunity to ask questions of brokers on the trading floor.



