## TRAINING COURSES FOR 2019

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All course details in this document are accurate as of **24 January 2019**.

Member central banks/monetary authorities are welcome to indicate interest by writing in to azharin@seacen.org with the name of the course and potential number of participants.

Latest updates will be sent to the SEACEN Liaison Officers in charge of Training and Directors of Training in each member central bank/monetary authority and made available on the SEACEN website (www.seacen.org).
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MACROECONOMIC AND MONETARY POLICY MANAGEMENT
MACROECONOMIC AND MONETARY POLICY MANAGEMENT (MMPM)

MP1B: Intermediate Course on Econometric Modeling and Forecasting

Dates : 19 – 23 August 2019
Venue : TBC
Host : Central Bank of Sri Lanka

This course focuses on selected modelling and estimation techniques that are increasingly becoming available in econometric software packages and therefore more widely used in central banks. These approaches include state-space modelling and applications using the Kalman filter; Bayesian econometrics, and extensions of conventional VAR analysis to structural approaches such as SVARs, TVP-SVAR and FAVARs using Bayesian estimation techniques, dynamic factor models, and nowcasting approaches.

Objectives
At the end of the course, participants will be able to: (1) specify and estimate state-space models; (2) estimate, manipulate, and interpret different types of VAR models; (3) specify, estimate, and interpret univariate and multivariate models using Bayesian techniques such as the Gibbs sampler; and (4) use mixed-frequency data models for nowcasting purposes.

Target Participants
This course is intended for central bank staff whose duties involve significant quantitative analysis and research. Participants are expected to have excellent quantitative skills and extensive experience using econometric computer programs such as EViews. Some experience in the use of the computer software R would be ideal but is not required.
MP2A: Analytics of Macroeconomic and Monetary Policy Management

Dates: 7 – 11 October 2019
Venue: TBC
Host: Bank of Papua New Guinea

This course emphasizes technical and analytical aspects of macroeconomic and monetary policy management, including monetary policy transmission mechanisms, assessing the stance of monetary policy, inflation dynamics, early warning indicators of financial instability, exchange-rate management issues, and the implementation of macroprudential policies. It focuses on both theory and application, using lectures together with hands-on exercises and case studies.

Objectives
At the end of the course, participants will be able to: (1) discuss monetary policy frameworks, transmission mechanisms, and communicating monetary policy; (2) appreciate the issues associated with exchange-rate management and the implementation of macroprudential policies; (3) assess the stance of monetary policy in relation to the macroeconomic conditions facing an economy; (4) understand the channels through which monetary policy affects the economy; and (5) evaluate the stylized facts about capital flows as well as the scope for capital flows management measures.

Target Participants
This course is intended for middle-level officers or technical staff whose work involves macroeconomic surveillance and analysis of monetary policy. Participants should have at least two years’ relevant working experience and be familiar with basic econometrics and the use of econometric software such as EViews.
The globalization of international finance and the increased integration of emerging markets into the international monetary and financial system have had major implications for the conduct of monetary policy. For example, the traditional monetary transmission mechanism depends more and more on global factors that influence domestic credit, exchange rates and long-term interest rates. Moreover, new channels of monetary transmission as well as new tools for analyzing them have been identified. In addition, monetary as well as financial stability considerations now include an assessment of the behavior of global banks that extend credit internationally as well as of international investors that purchase debt securities issued by firms in emerging markets. All of these factors have led to a lively debate whether emerging market economies’ central banks have diminished control over domestic monetary and financial conditions. This course will cover these developments and bring participants to the forefront of the theoretical and policy debates.

**Objectives**

At the end of the course, participants will be able to: (1) analyze different facets of financial globalization, monetary and financial spillovers and their consequences for monetary and financial stability; (2) recognize the changes that have taken place in the implementation of monetary policy and liquidity management; (3) use empirical tools to evaluate the channels of monetary policy transmission; and (4) quantify the changes in interest rate pass-through as a result of these developments.

**Target Participants**

Experienced senior economists or technical staff from central banks/monetary authorities who are actively involved in research on monetary policy transmission mechanisms. They are also expected to have excellent quantitative skills and extensive experience using econometric computer programs such as EViews.

This is an intensive and highly interactive event involving frank discussions and exchanges of views. Participants will be expected to confidently and authoritatively share, explain, and discuss their central bank’s monetary policy strategy, operations, and transmission, which require a sound knowledge of the subject matter. This Signature Course is not intended to serve as an introduction to – or a refresher of – aspects of monetary policy.
The effective implementation of monetary policy requires the ability to respond appropriately to developments in various financial markets. Since the onset of the great financial crisis, monetary policy strategies in several countries have become increasingly unconventional, encompassing large-scale asset purchase, forward guidance, and negative nominal interest rates. Moreover, monetary policy operations now also encompass financial-stability objectives. Are there lessons to be learned for monetary policy strategies after the great financial crisis? This course will discuss how monetary policy strategies and operations need to be structured and implemented to achieve the desired objectives under different circumstances.

**Objectives**
The course aims to equip participants with the tools necessary to give advice on the implementation of monetary policy in different circumstances. In particular, participants will learn to: (1) conduct liquidity forecasting; (2) assess alternative methods for policy interest rate management; (3) evaluate strategies under inflation targeting and other approaches; (4) assess the need for interventions in the foreign exchange market in response to currency volatility, currency misalignments, and capital flows; and (5) determine the need for, and consequences of, sterilization policies.

**Target Participants**
Central bank staff who are responsible for advising on or carrying out monetary policy operations. Participants should have at least two years’ experience in this function.
MP3B: Analysis and Modelling of Macro-Financial Linkages

Dates: 8 to 12 July 2019  
Venue: TBC  
Host: Bank Indonesia

Monetary policy actions have broader sectoral impacts encompassing the banking, financial, government, and real sectors. Likewise, developments and shocks emanating from one or several of these sectors have profound monetary and financial stability implications. This course is designed to analyze and model macro-financial linkages with the aim of tracing monetary policy transmission to various sectors of the economy as well as analyzing monetary and financial stability implications of domestic and external developments and shocks from various sectors. Topics will include macro-financial linkages and policy spillovers, asset prices and macroeconomic outcomes, global liquidity, cross-border banking, and the bank lending channel and feedback loops from both real and financial sectors.

Objectives
At the end of the course, participants will: (1) have a clearer understanding of the channels through which monetary policy actions affect financial and real sectors; (2) appreciate interlinkages and feedback loops between banking, financial, government, and real sectors; and (3) have greater knowledge of macroeconomic outcomes and monetary and financial stability implications of asset prices, cross-border banking and liquidity, and sovereign debt.

Target Participants
This course is intended for central bank staff with at least two years of experience in monetary and/or financial stability analysis and research. Participants are expected to have good background in economics and strong quantitative skills.
MP3C: International Macroeconomic Analysis

**Dates**: 4 – 8 March 2019  
**Venue**: TBC  
**Host**: Bank Indonesia

The high degree of openness and increased integration of most SEACEN economies have complicated central banks’ tasks in macroeconomic and monetary policy management, especially in handling external shocks. The great financial crisis and its aftermath is one such episode where even fundamentally strong economies can be affected by contagion effects. This course will address issues of current concern, including current account imbalances; the management of capital flows; exchange rate measurement and assessment; cross-border banking; measures/indicators of external financial transactions and holdings of foreign assets and liabilities; and external vulnerability analysis. The course draws on key external sector data sets such as the Balance of Payments Statistics, International Investment Position, International Banking Statistics, among others.

**Objectives**
At the end of the course, participants will be able to: (1) assess the impact of international capital flows and the management of such flows; (2) construct and interpret alternative exchange rate indices; (3) provide an assessment of exchange rate equilibrium and misalignment; (4) monitor and analyze the build-up of external vulnerabilities by understanding interlinkages between external account indicators; and (5) conduct an external debt sustainability analysis.

**Target Participants**
Middle-level officers/technical staff of central banks with at least two years of experience in external sector analysis and surveillance, exchange rate policy and/or monetary and financial policy analysis and surveillance. A strong background in international macroeconomics and/or international finance is an advantage.
MP4B: Financial Cycles and Crises

Dates: 2 – 6 September 2019
Venue: TBC
Host: The SEACEN Centre

The globalization of finance and increased international linkages of financial markets between economies have focused attention on the potential role of domestic and international financial cycles as a cause of fluctuations in national asset prices and in heightened risks to financial stability. A financial cycle captures systematic patterns in the financial system that can have important macroeconomic consequences and is closely related to the concept of procyclicality in the financial system. Both across countries and over long periods of time, regular financial cycles are clearly identifiable, are distinct from the business cycle in their frequency and amplitude, typically presage financial crises, and play an important role in the current policy debate on how to increase the resilience of the financial system. Despite these stylized facts, we are still far from understanding the properties of the financial cycle compared to our knowledge of the features of the business cycle. This course will therefore review the evidence on the patterns of financial cycles, discuss conventional and alternative approaches to the measurement of financial cycles, discuss their causes and consequences, and examine possible policy responses.

Objectives
At the end of the course, participants will be able to: (1) describe the facts, models, and policy implications of financial cycles; (2) evaluate the usefulness of early warning indicators of financial stress/crises; and (3) assess the appropriateness and effectiveness of various policy responses, including macroprudential policy, to the evolution of financial cycles.

Target Participants
Central bank middle/high-level officers either from monetary policy or financial stability departments and who are involved in analyzing and assessing the use of monetary policy and macroprudential policy to promote macroeconomic and financial stability.
FS2C: Financial Stability and Macroprudential Supervision *(Joint with FSS)*

**Dates:** 16 – 20 September 2019  
**Venue:** TBC  
**Host:** Bank Indonesia

The frequent recurrences of financial crises – in individual countries and more globally – seem to have been an intractable feature of the modern globalized economy, at least for the last 50 years. This course focuses on the types of collective activities undertaken by nonfinancial firms and households, with the participation of financial institutions, that often lead to financial crises, and how these collective activities might possibly be identified and restrained at an early stage. It provides a review of recent crises, an analysis of financial stability mandates and governance structures that may equip jurisdictions to enact preventive and/or reactive measures such as macroprudential policies (MPP) to bolster the resilience of financial institutions (especially large, systemic institutions), stem contagion, tame the financial cycle, and respond to developing crises in a responsible and responsive manner. The course ends with a crisis management simulation that will give participants the chance to make decisions that may either end a hypothetical crisis or further exacerbate it.

**Objectives**
By the end of the course, participants should understand the various threats to financial stability that exist in financial sectors of emerging and advanced economies; be able to link proposed policy measures to these specific threats; be able to spot flaws and recommend improvements in financial stability mandates and governance structures; be able to explain the relative effectiveness of monetary policy and MPP in addressing threats; know how to distinguish between macro-prudential and micro-prudential supervision and explain how they might overlap; and be conversant in the full range of tools that central banks, banking supervisory agencies, deposit insurance funds, and finance ministries have at their disposal to manage and resolve financial crises.

**Target Participants**
This course is intended for participants who are engaged in macroprudential surveillance or financial stability oversight in central banks and monetary authorities. Participants should have three to five years of experience in banking or broader financial sector supervisory activities, such as on-site examination, off-site monitoring, or regulatory policy development. They should also have a basic understanding of the preeminent role of capital and liquidity in minimizing the risk of individual and collective failure of financial institutions. By invitation of SEACEN members, officials of stand-alone financial sector regulatory authorities and deposit insurance funds are also encouraged to attend.
A risk-based or risk-focused supervisory regime directs supervisory attention towards those banks, and towards those activity areas within individual banks, that generate the highest risk of failure and potentially costly government intervention. Using the Basel Committee Core Principles of Effective Banking Supervision as an organizational tool, this interactive course offers a sweeping review of the primary risks faced by banks – solvency, credit, market, operational, liquidity, compliance, reputation, strategic, and misconduct – and shows how a preliminary identification and assessment of risks can be made using data generated from regulatory reports. Working in groups with actual bank data, participants will utilize level, trend, and peer group analysis to gain a deep understanding of the risk profile, condition, and performance of sample banks, and will develop findings and conclusions that can be tested on-site.

**Objectives**

By the end of the course, participants will have gained the ability to analyze the condition and performance of a bank using level, trend, and peer group analysis; will be able to describe the major risks faced by banks in detail; will be equipped to do a preliminary risk identification and assessment of risks at a bank; and will be able to summarize preliminary findings and conclusions in an oral presentation.

**Target Participants**

The course is intended for on-site examiners, off-site analysts, and regulatory policy specialists with one to three years of experience in banking/financial sector supervision. Participants are expected to have a basic familiarity with bank financial statements (balance sheet, profit and loss, and cash flow), basic knowledge of other regulatory measures such as past-due status and original/remaining time to maturity of assets and liabilities, an understanding of basic summary statistics (medians and percentile rankings), and an ability to quickly read through tables of monetary amounts and calculated ratios to identify key trends and outliers.
FS1B: Off-site Monitoring

Dates: 4 – 8 November 2019
Venue: TBC
Host: Central Bank, Chinese Taipei

Off-site monitoring is considered a routine operation at banking supervisory agencies around the world. However, just because it is routine does not mean that it is unimportant. This course will provide a new perspective on the tools and techniques of off-site monitoring in a risk-based supervision framework, emphasizing that analysts should utilize all available sources of information – not only regulatory reports submitted by the banks, but also the audited financial statements, Board minutes, reports of ratings agencies and securities analysts, and even media reports. Specific topics to be covered include: risk identification through level, trend, and peer group analysis; early-warning systems; the ideal relationship between off-site monitoring and on-site examination; the involvement of off-site analysts in determining the supervisory rating and preparing the supervisory plan; the legal and regulatory requirements on external auditors and the involvement of the banking supervisor in setting the scope and utilizing the results of the external audit; recent examples of poor performance of external auditors; and Pillar 3 disclosure requirements in Basel II / III. Case studies will test participants’ ability to identify risks from actual bank data.

Objectives
Participants who complete this course will have a full understanding of risk identification using off-site tools; the knowledge to utilize the full range of information available to maintain a real-time understanding of the condition and performance of a bank; the ability to draw reasonable conclusions and propose supervisory actions from an early warning system; and an appreciation of the strengths and limitations of external audit.

Target Participants
The ideal participant will have at least two years’ experience in on-site examination and/or off-site monitoring at a banking supervisory agency. Participants must have at least a basic familiarity with bank financial statements (balance sheet, profit and loss, and cash flow) and regulatory reports such as maturity gap reports for liquidity and/or interest-rate risk analysis and reports on FX-denominated assets and liabilities for FX risk analysis; concepts and reports on classified and non-performing loans; a basic understanding of the difference between stock indicators and flow indicators; and an appreciation for the need to annualize ratios to enable comparability of indicators measured over different time periods.
FS1C: On-site Examination

Dates: 25 – 29 March 2019  
Venue: Malaysia  
Host: The SEACEN Centre

On-site examinations play a critically important role in the supervisory oversight functions of any central bank or regulatory authority. Undertaking a detailed review of a particular aspect or function of a firm is the only real way to ascertain whether the firm is in fact putting into practice what their policy and process documents say they should be doing.

On-site examinations are also an important way for the regulatory authority to get an insight into what the culture within an organization is like, and to appreciate how well trained and experienced staff at all levels of the first, second and third lines of defense within the firm are.

Furthermore, as central banks and regulators move from a CAMELS-based approach to a risk-based supervision approach, on-site examinations will play an even more important role in their assessment and review of a firm.

The course will include formal classroom-based lectures, discussions, case studies, and interactive role-play on interviewing a firm’s Board, senior management and non-executive directors. It will be delivered by subject matter experts drawn from The SEACEN Centre’s Faculty, member central banks/monetary authorities and others from the global regulatory, banking, and consulting community.

This is therefore a key recommended course that should be part of the mandatory training program for supervisors and specialists at all central banks and regulatory authorities. The course is open to more experienced supervisors, risk specialists, and other regulatory staff who wish to increase their knowledge and understanding of key techniques, methodologies, and global best practices in this important function.

Objective
The aim of the course is to teach and develop best practice in the field of on-site examinations. This will include detailed training on many of the key areas that are normally covered during such reviews, including: scoping examinations; assessing provision adequacy and non-performing loans; evaluating commercial real estate and construction loans; evaluating the quality of internal audit, risk management and compliance functions; and evaluating the Board and senior management.

Target Participants
Participants are required to have at least three years of experience working in an on-site examination or risk specialist function, or otherwise more generally within supervision, off-site examination or other related functions.

The course is also open to experienced staff at related prudential and conduct risk financial supervisory authorities which are not housed within the central bank / monetary authority, and we actively encourage members to extend invitations to these institutions.
FS2A: Stress Testing (Together with Federal Reserve) (Signature Course)

Dates: 23 – 27 September 2019
Venue: TBC
Host: Autoriti Monetari Brunei Darussalam

Stress testing is now the key macroprudential tool that supervisors and central banks use in assessing both the individual risks a firm may pose or be exposed to, as well as the system wide risks and their potential impacts. Stress testing is also commonly used to set additional capital and liquidity buffers for individual institutions.

A complete stress testing exercise is also more than just a numerical calculation of the impact of possible shocks. It involves choices on the coverage of institutions, risks, and scenarios; the application of a quantitative framework to link various shock scenarios to solvency and liquidity measures; a strategy for the communication of the results; and follow-up measures, if warranted. This course is designed to help participants de-mystify the large and often confusing menu of choices in each of the areas of stress testing, as well as answer questions on the interpretation of the results and their comparability. The course also covers the ICAAP process, how it works and how supervisors and regulators should review the outcomes presented to them, covering Pillars 1, 2A, 2B, and 3.

The course will examine the latest developments in macroprudential supervision, including a review of commonly-used macroprudential policies, triggers for intervention, designation of banks as systemically important, institutional mechanisms for applying policies, and macro stress testing.

Objectives
To teach participants the major elements of a stress testing framework, based primarily on the USA’s CCAR exercise, but also covering stress testing at the Bank of England and the European Central Bank. This course will provide participants an opportunity for in-depth discussion of the practical application of stress testing methodologies and standards for both individual banks and the financial system. It will also assist participants in understanding how, when, and what kind of macroprudential policies should be used to build up resilience of financial institutions to imbalances, asset price bubbles, and other threats to financial stability.

Target Participants
The course targets experienced bank supervisors working in financial stability, on-site examination, off-site monitoring, and regulatory policy development who are tasked with supervising institutions, scrutinizing the build-up of threats to financial stability, and recommending or implementing macroprudential measures.

Participants should have some experience in the conceptual framework of stress testing, preferably having carried out one or more aspects of stress testing, and / or have experience in bank capital planning processes or risk areas to derive the most from the course.
FS2B: Problem Bank Intervention and Resolution

Dates: 5 – 9 August 2019
Venue: TBC
Host: Central Bank of Sri Lanka

The Great Financial Crisis (GFC), which began in 2007 and whose effects are still being felt today, exposed weaknesses in the systems of problem bank intervention and resolution in many countries around the world. As a result, jurisdictions have been improving their frameworks and tools. This course covers the range of available tools in the late 2010s for intervention (enforcement actions, conservatorship/provisional administration, etc.), resolution (sale of business, bridge institution, asset separation, and bail-in), and bankruptcy / liquidation. When to intervene or resolve will also be stressed. The course will also cover emerging trends in the priority of claims in bank resolution, choosing the least-cost option, and the “single point of entry” concept for complex or multinational banking organizations. The basics of recovery plans (plans submitted by the bank to ensure the delivery of critical services while the bank attempts to recover from severe financial or non-financial problems) and resolution plans (plans developed by the banking supervisor, in consultation with the bank, to ensure the delivery of critical services in resolution) will also be explained and discussed. Case studies will show participants effective and ineffective attempts to intervene in and resolve problem banks in recent years.

Objectives
The course will enable the participants to frame discussions within their regulatory/ supervisory organizations around the topics of (1) when and how to intervene or resolve; (2) how to choose the appropriate resolution tool(s); (3) how to issue guidelines to their regulated banks on the preparation of recovery plans; (4) how to work with banks to develop resolution plans.

Target Participants
Participants should have at least three years of experience in the regulation and supervision of problem banks. They should possess sufficient familiarity with the financial statements of banks in order to understand real world examples of merger, split, liquidation and distribution of assets, holding company and group structures, and estimating costs of particular resolution strategies. It is recognized that central banks and monetary authorities are often not the supervisory or resolution agencies in some economies; accordingly, SEACEN members are encouraged to invite participants from these agencies in their jurisdictions as well.
FS2C: Financial Stability and Macroprudential Supervision (Joint with MMPM)

**Dates**: 16 – 20 September 2019  
**Venue**: TBC  
**Host**: Bank Indonesia

The frequent recurrences of financial crises – in individual countries and more globally – seem to have been an intractable feature of the modern globalized economy, at least for the last 50 years. This course focuses on the types of collective activities undertaken by nonfinancial firms and households, with the participation of financial institutions, that often lead to financial crises, and how these collective activities might possibly be identified and restrained at an early stage. It provides a review of recent crises, an analysis of financial stability mandates and governance structures that may equip jurisdictions to enact preventive and/or reactive measures such as macroprudential policies (MPP) to bolster the resilience of financial institutions (especially large, systemic institutions), stem contagion, tame the financial cycle, and respond to developing crises in a responsible and responsive manner. The course ends with a crisis management simulation that will give participants the chance to make decisions that may either end a hypothetical crisis or further exacerbate it.

**Objectives**

By the end of the course, participants should understand the various threats to financial stability that exist in financial sectors of emerging and advanced economies; be able to link proposed policy measures to these specific threats; be able to spot flaws and recommend improvements in financial stability mandates and governance structures; be able to explain the relative effectiveness of monetary policy and MPP in addressing threats; know how to distinguish between macro-prudential and micro-prudential supervision and explain how they might overlap; and be conversant in the full range of tools that central banks, banking supervisory agencies, deposit insurance funds, and finance ministries have at their disposal to manage and resolve financial crises.

**Target Participants**

This course is intended for participants who are engaged in macroprudential surveillance or financial stability oversight in central banks and monetary authorities. Participants should have three to five years of experience in banking or broader financial sector supervisory activities, such as on-site examination, off-site monitoring, or regulatory policy development. They should also have a basic understanding of the preeminent role of capital and liquidity in minimizing the risk of individual and collective failure of financial institutions. By invitation of SEACEN members, officials of stand-alone financial sector regulatory authorities and deposit insurance funds are also encouraged to attend.
Non-performing loans (NPLs) have reached, or are reaching, systemic levels in many countries. The resolution of such NPLs is a complex and costly process. Bank NPL problems tend to emerge after credit booms or protracted periods of low growth. NPLs crowd out new lending, eroding both the profitability and solvency of banks.

The course will also cover the key elements and the main implementation challenges of the new IFRS 9 expected loss provisioning standard. This will include discussion of modelling approaches, multiple economic scenarios, criteria for stage transfers, key areas of judgement under the standard and latest global bank practice on IFRS 9 during 2018/19. This will enable supervisors to undertake IFRS 9 preparedness and ongoing implementation reviews for their banks, and also learn about the key areas of IFRS 9 they will need to challenge their banks on.

Objectives
The aim of this course is to help supervisors identify potential problem loans and the level of losses or provisions that are appropriate, before they become a material issue for a bank, or the financial system. Participants will be shown techniques on how to undertake problem loan and provision adequacy reviews, in order to ensure banks have correctly identified the value of such assets and the underlying security, and to ascertain whether they are following the correct recovery strategies.

Target Participants
The course is aimed at supervisors, policy makers and central bank staff who are involved in reviewing bank portfolios and/or putting in place policies related to the resolution of NPLs and opining on the adequacy of loan loss provisions held by banks. It is also aimed at those involved in IFRS 9 working groups and those involved in assessing firms’ implementation of IFRS 9. Participants should have at least three+ years of experience in working on NPLs or undertaking asset quality and/or provision adequacy reviews or have experience in supervising banks with such exposures or dealing with related issues from a policy perspective.
The Great Financial Crisis (GFC), which began in August 2007 and whose effects are still being felt today, brought to center stage the preeminent role of liquidity risk and funding risk measurement and management. Maturity mismatches, excessive reliance on volatile funding, overly optimistic assumptions on the saleability of assets thought to be liquid, and an imperfect understanding of the behavior of depositors – both insured and uninsured – led many institutions to be unprepared for the tumultuous effects of sudden drops in actual and perceived asset quality that brought down many large financial institutions. This course reviews fundamental concepts of liquidity risk measurement and management, analyzes what went wrong during the 2007-2009 period, covers the public policy responses to these prior failures (such as the Basel III liquidity metrics, contingency funding plans and liquidity transfer pricing, the novel requirement of an Internal Liquidity Adequacy Assessment Process or ILAAP to complement the Internal Capital Adequacy Assessment Process or ICAAP, and the growing use of liquidity stress testing), and views liquidity risk management from the bankers’ point of view as well as the supervisors’, and from a macro as well as a micro perspective.

Objectives
By the end of the course, participants will be able to explain how and why banks fail because of inadequate liquidity risk management; distinguish between market liquidity risk and funding liquidity risk; understand both the rationale and the mechanics of the liquidity coverage ratio, the net stable funding ratio, survival horizon analysis, and other contemporary metrics and tools of liquidity risk management; know how to assess the adequacy of a contingency funding plan and an ILAAP; and understand the basics of liquidity transfer pricing and liquidity stress testing.

Target Participants
This course is intended for financial stability or banking supervision personnel with two to four years of experience, and with a role in either developing or applying policies to address liquidity risk management at commercial banks and other depository institutions. Participants should have a basic understanding of the Basel Core Principles of Effective Banking Supervision and other Basel Committee documents related to liquidity and have experience reviewing a bank’s liquidity position either on an on-site examination or through the off-site monitoring process. By invitation of SEACEN member central banks / monetary authorities, officials of stand-alone financial sector regulatory authorities and deposit insurance agencies are also encouraged to apply.
FS3C:  ICT Risks, including Cybersecurity

Dates: 26 – 30 August
Venue: TBC
Host: State Bank of Vietnam

Banks and other financial institutions (FIs) face multiple Information and Communication Technology (ICT) risks, and the risks are growing as there are more channels through which outside actors can influence FIs’ key systems, including financial technology (FinTech) innovations. The course reviews the main types of ICT risks: availability and continuity, security (including cybersecurity), change, data integrity, and outsourcing; and covers the basic components of an ICT risk assessment, to be performed by the FI itself and reviewed by the banking supervisor as part of an ICT risk management examination. Available techniques to mitigate these risks will also be discussed. Taking a deeper dive into the troubling area of cybersecurity, the course will cover key cybersecurity risk; FI trends and changing threats, the risk management lifecycle; threat actors, patterns, and tools; common vulnerabilities; people, process, and technology controls; and how to pursue defense-in-depth.

Objectives
To give the participants a basic understanding of the range of ICT risks, together with programs and tools to identify, measure, monitor, and mitigate or control these risks. The main emphasis will be on the need for every FI to have an ICT risk management system and for the banking supervisory agency to evaluate that risk management system.

Target Participants
The course targets bank supervisors who have some experience evaluating the level of banks’ ICT risk and the quality of ICT risk management. Participants should have experience either as supervisors of financial services firms (such as safety-and-soundness examiners or ICT examiners) or have directly worked in a technology-related area in order to gain the most from the course and be able to contribute appropriately to the discussions.
Financial Technology (FinTech) poses both opportunities and challenges for traditional financial institutions and their regulators. On the one hand, FinTech companies may be competitors for banks’ loan and payment customers; on the other hand, FinTech companies may partner with banks to increase banks’ efficiency. FinTech providers appear regularly, proposing relief of customers’ “pain points.” Regulators, for their part, must decide on activity-based vs. entity-based regulation, or, indeed, whether or not to regulate at all. This course is a blend of financial stability, financial supervision, and payments topics. Participants will learn about the key trends in FinTech, such as lending and investing activities; wealth management activities; and making payments faster, better, and cheaper; and will discuss how to utilize regulatory sandboxes to test the integrity and consumer uptake of FinTech applications. The focus will then shift to an up-to-date discussion of the ever-changing market for virtual currencies (crypto assets, crypto currencies, tokens, etc.) and efforts by regulators around the world to oversee initial coin offerings and exchanges.

**Objectives**
To give participants a thorough conceptual grounding in FinTech and introduce them to the most important products and services that may pose threats to the profitability of traditional financial institutions, the stability of the financial sector, or to the integrity of the payment system, and to generate thought and discussion about smart regulation of the FinTech environment. Participants will also be able to frame discussions of the many aspects of virtual currencies from all perspectives—financial stability, financial integrity, and consumer protection.

**Target Participants**
The course is aimed at staff of central banks and monetary authorities from the financial stability, financial supervision, or payments areas, with two to three years of professional experience and responsibility. Those responsible for the development of regulatory policy are especially encouraged to join.
FS4B: Big Data, Regulatory Technology, and Supervisory Technology

**Dates:** 15 – 17 October 2019  
**Venue:**  
**Host:** Bank of Thailand

Advancements in technology are promising to revolutionize the practice of banks’ compliance with legal and regulatory requirements, and of banking supervisors’ ability to spot risks at individual banks and in the system as a whole at an earlier stage and to respond to those risks more efficiently with less staff time. This brief, intensive seminar will feature a “roundtable” format of central bank / monetary authority officials, together with industry professionals, to sort through the hype and arrive at firm conclusions about the most promising near-term innovations, including those that are already being utilized in financial institutions and their regulators around the world. Possible topics include: the use of technology by banks for more efficient and risk-focused AML/CFT compliance; the utilization of a broader range of indicators (including nonfinancial indicators) for the assessment of current or potential borrowers’ credit risk; the use by regulators of natural language processing to read through voluminous bank documents; the potential of technology to reduce regulators’ Type I and Type II errors in reviewing suspicious activity reports; and the potential of Big Data to aid supervisors’ identification of potential problems in bank loan portfolios.

**Objectives**
Upon completing the seminar, participants will know the range of bank regulatory compliance tasks that can be made easier and more effective with the use of technology; understand clearly the differences between artificial intelligence, machine learning, and other technology concepts; gain insight into the most promising areas of development in both regulatory technology (RegTech) and supervisory technology (SupTech); and, it is hoped, be able to bring back that knowledge to push forward workable innovations at their respective organizations.

**Target Participants**
The seminar is geared toward upper-level management at central banks / monetary authorities, including heads of departments, Assistant Governors, Deputy Governors, and senior advisors. An intensive interest, but no prior knowledge, of FinTech, Big Data, RegTech, and SupTech is required. Although the course is geared primarily towards banking regulatory and supervisory officials, officials in ITC, financial innovation, change management, and other area responsibilities where technology is utilized may also attend.
PAYMENT AND SETTLEMENT SYSTEMS
PAYMENT AND SETTLEMENT SYSTEMS (PSS)

PS1A: Payment Systems Operations

Dates: 22 – 26 April 2019
Venue: TBC
Host: TBC

The course focuses on the current development in the structure and operation of PSS (including current state-of-the art PSS technology), system interdependence, risk identification and mitigation, and critical roles of central banks in PSS. The course also introduces participants to internationally recognized standards for sound and efficient PSS and principles of financial market infrastructures. Concepts such as large-value payment systems (LVPS), retail payment systems (RPS), deferred net settlement (DNS) and real-time gross settlement (RTGS) systems, card-based payment systems, national payment switches, and global initiatives to make payments faster, cheaper, and more secure will be covered.

Objectives
At the end of the course, participants will be able to: (1) describe detailed operations of LVPS, RPS, and securities settlement systems; (2) explain the increasing importance of system interdependence; (3) identify risks in PSS activities and determine risk mitigation tools/strategies (4) explain critical roles of PSS in safeguarding monetary and financial stability; and (5) explain rationales of international standards.

Target Participants
The course is designed for staff from central banks with at least one to two years of work experience on PSS and/or risk management, or IT supervision. Participants should have some basic knowledge of payment and settlement concepts and operations.
This course will build on knowledge gained from the Payment Systems Operation course, covering the governance, oversight and regulation of core payment and settlement systems [Retail Payment Systems (RPS) and Large Value Payment Systems (LVPS)].

It will review some of the important aspects of regulating PSS, extending the coverage to cross-border issues, foreign exchange settlement, and recent trends in market infrastructure improvement. It will also focus on the new challenges posed by cryptocurrencies and related technical payment innovations, and how central banks should regulate these.

**Objectives**
Through lectures, interactive discussions, case studies, and sharing of experiences from the various delegates’ countries, participants will learn about the fundamental concepts of oversight on LVPS and RPS, in line with leading standards and national policy objectives. The course will also cover the latest developments in FinTech, mobile payments and cryptocurrencies, as well as emerging risks and challenges confronting both LVPS and RPS. Participants will develop an understanding on how such trends and innovations impact central banks in carrying out their PSS oversight functions.

**Target Participants**
The course is aimed at mid-level officers or technical staff, with at least two years working experience of payment and settlement operations, policy, oversight, risk profiling and management, or IT supervision. Participants should have basic knowledge of payment and settlement concepts and operations.
The rapid advancement of technology has opened new opportunities for the enhancement of systems used for originating processing payments. At the same time, it has also encouraged perpetrators of cybercrime to develop more sophisticated and advanced tools. This increases the exposure of financial institutions to cyberthreats, which, if not identified and caught in time, can have severe implications on financial institutions and more generally, on financial stability. This course covers cutting-edge issues and developments in payment systems involving the application of technology, such as cross-border payments and correspondent banking; the potential of technology to enhance financial inclusion; the spread of mobile wallets and contactless payments; the potential of open application programming interfaces (open APIs) to enhance the bank customer experience; and 24/7 availability and fast payments. In addition, the course will explain emerging cyberthreats to payment systems and how to identify, monitor, and mitigate these threats; and the basics of a cyber resilience assessment framework for payment systems.

Objectives
Upon completing the course, participants will have an up-to-the-minute understanding of the latest developments in payment systems utilizing advanced technology, and whether or not these developments pose threats to financial stability, consumer protection, or the integrity of the payment system.

Target Participants
The course is aimed at central bank staff whose principal role is the operation or oversight of systemically important payment systems, with at least five years relevant working experience. Staff who are involved in developing payment policy and oversight may also apply. Participants should be familiar with the basic characteristics and functioning of large-value payment systems (LVPS), retail payment systems (RPS), payment cards, and various models of mobile financial services.
LEADERSHIP AND GOVERNANCE
LEADERSHIP AND GOVERNANCE

L1A: Leadership Masterclass I – Leadership Decision-Making

**Dates**: 17 – 21 June 2019  
**Venue**: South Korea  
**Host**: The Bank of Korea

Distilling insights from psychology, behavioural economics and neuroscience, this Masterclass exposes participants to an understanding of the complexities and realities that make or break the effectiveness of decision environments within their organizations. The curriculum will employ a decision-making framework and expound on how human feelings influence risk perception, economic transactions, judgement, and choice outcomes. Class discussions will examine what it takes to answer tough questions, structure effective negotiations, improve the accuracy of estimates, and transform information into new formulations.

**Objectives**
- Expand your emotional and social intelligence to become a better ‘decision architect’
- Identify and overcome pitfalls in developing wise judgement and making effective decisions
- Adopt skills for designing accountability systems for judgement and decision-making and for gaining support for your decisions

**Target Participants**  
Aimed at senior executives of Deputy Director level at least, who are keen to learn the art and science of making rational choices to create strategic advantage.
Leadership Masterclass II – Innovation Intervention for Leaders

**Dates**: 23 – 26 September 2019  
**Venue**: Singapore  
**Host**: Monetary Authority of Singapore

All organizations, including central banks, must create value for their stakeholders. Leaders who innovate are better able to deliver greater results with fewer resources. This Masterclass offers a hands-on and team-based experience in design thinking to catalyze creativity. Participants must participate in a range of exercises, aimed at taking them well outside their zone of comfort and build their confidence to think ‘disruptively’.

**Objectives**
- Gain an understanding of the innovation concepts, methodologies and processes
- Embrace an intrapreneurship and innovation mindset
- Develop strategies to better collaborate, work in teams, and lead others

**Target Participants**
Aimed at executives from both middle- and senior-level management, who are particularly keen to actively learn how to nurture a culture that values innovative ideas and creative solutions.
L2A: Springboard Leadership – Leading Adaptively

Dates: 7 – 12 April 2019
Venue: Malaysia
Host: Bank Negara Malaysia

This Springboard course offers an application of Complex Adaptive Leadership, an integrated approach to the subject of leading with greater agility to optimize organizational performance. The focus is on specific tools to address strategic challenges and enable the achievement of better and faster results in the leadership space. Through a variety of experiential activities, participants will learn that adaptability is a teachable process, not simply an innate talent. This week-long course will seamlessly cover three pertinent areas for enhancing adaptive leadership: leading self, leading in the digital era, and leading others.

Objectives
- Gain a better understanding of the need for leadership to adapt in a complex landscape, and how simple rules can apply to improve engagement and productivity
- Develop a powerful mix of behaviors to enable leadership not only downwards but upwards, sideways, and outwards to extend influence
- Articulate your personal calling and develop a strategy for advancing it

Target Participants
Aimed at middle-level managers with at least three years of experience, who lead teams and/or are involved in top-priority projects.
G1A: Central Bank Governance - Roles and Objectives of Modern Central Banks
(Signature Course)

Dates: 11 – 13 November 2019  
Venue: Malaysia  
Host: Bank Negara Malaysia

This seminar will cover areas including the functions, structures, processes, authority to design policy, degree of responsibility and influence, and differences in functions between mature and emerging financial market environments. As best practices in governance are not homogenous, a critical success factor for this seminar is that participants must be prepared to share experiences and compare approaches to tackling the challenges faced in their individual central banks.

Objectives
The seminar will offer practical advice on particular governance issues, stimulate an exchange of perspectives among participants, and guide purposeful reflections for the identification of action steps that can be implemented upon return to the workplace.

Target Participants
The seminar is aimed at the most suitable high-level executives involved in the particular governance areas with considerable contribution to decision-making to promote the strengthening of governance arrangements in their central banks.
HC1: Strategic Human Capital – Emerging and Pacing Competencies for Central Banking

**Dates** : 25 – 27 March 2019  
**Venue** : Philippines  
**Host** : Bangko Sentral ng Pilipinas

This course is aimed at offering an understanding on the benefits of having in place a leadership competency framework to manage talent more strategically. It will bring to the fore perspectives on the leadership competencies for organisations to remain effective and relevant amidst technological advancement and new business strategies.

**Objectives**

- Discuss the related strategic human capital challenges including talent acquisition, engagement and retention.
- Examine key strategies for building a strong leadership pipeline that demonstrates the right competencies to drive organisational success
- Explore steps in building a common inventory of leadership competencies for SEACEN member central banks

**Target Participants**
Aimed at the relevant human capital practitioners