



Master of Arts in Global Risk (MAGR)

Program Overview

Introduction

The heightened instability of countries, regions, and financial markets in the world today demands a new way of looking at global challenges. It also requires a new kind of global expert— one who is able to anticipate, understand, and analyze risk in a rapidly changing and interconnected world. To meet the growing demands of both the marketplace and candidates seeking to advance their understanding of global risk and uncertainty, in 2016 Johns Hopkins School of Advanced International Studies launched a Master of Arts in Global Risk (MAGR), a 13-month, cohort-based program at the SAIS Europe campus in Bologna, Italy. Building upon the school's strengths in multi-disciplinary analysis, the MAGR introduces students to theoretical concepts, tools, and frameworks from social and economic sciences that will allow them to undertake sophisticated global risk analysis on a variety of issues.

Since its inception, a total of 33 students have participated in the program. These MAGR graduates/alumni, representing 16 different countries from almost all continents, are now employed in diverse sectors worldwide. They join a network of more than 19,000 SAIS alumni based around the world, many of whom return once a year to Bologna for Alumni Weekend.

Format

MAGR students must successfully complete 12 courses and a capstone project.

The program begins with a four-week summer term during which students are introduced to fundamental concepts of microeconomics and international trade, mathematical skills and a quantitative introduction to statistical techniques, also essential in understanding risk. During the fall semester, students develop their economic understanding focusing on macroeconomic and financial risk, and begin to examine political and political-economy risks. Students explore the methodological problems associated with the analysis of risk and uncertainty and the different approaches to managing risk; they also learn how established democratic societies can rapidly become politically unstable and political risk quickly emerges. Students are required to take a course in corporate finance, providing the fundamentals in asset evaluation and investment analysis, and must choose two elective courses from SAIS Europe's fall semester curriculum.

The spring semester allows students to develop the principal tools for geo-political risk analysis, by analyzing the principal sources of risk at the global and international levels. Candidates are also introduced to the main

techniques for quantitative risk analysis employed in the financial industry. In spring semester students again take two additional elective courses.

Outside the classroom, attendance at the Faculty Research Seminars is strongly encouraged. Throughout the academic year, distinguished guests such as ambassadors, central bank governors, and business leaders deliver seminars and engage with students in an informal setting. Series themes include: International Economics and Finance, War and Peace in the Middle East, Europe's Security Challenges, The Changing Landscape of International Development, among others.

The MAGR culminates in a capstone project where students complete an 8-12 week focused summer internship experience relevant to program course work or an original thesis. In the internship option, students apply the knowledge and tools they acquired through the program to identify risks faced by a company or organization and provide recommendations to mitigate these risks. The MAGR Director and the SAIS Europe Office of Career Services work with students to recognize professionally rewarding opportunities at companies and institutions. Over the past years, many important companies have offered capstone projects. Though there is no guarantee that internships will develop into full-time employment, nor that these companies will hire interns every year, the list of companies which have offered capstone projects in the past indicates the range of business sectors in which MAGR students can operate:

- **Manufacturing:** *Lamborghini, Philips Group Markets, Tiffany*
- **Financial Sector:** *EBRD, CRIF, Goldman Sachs, Prometeia, Exotix Capital*
- **Security and Geopolitical Analysis:** *Control Risks, Dataminr, Global Guardian, European Investment Bank, Thomson Reuters Special Services*
- **Energy Resources and Environment:** *RP Global, inspiratia, Kalyon Holding A.Ş.*
- **Regional Studies:** *Princeton University*

The original research option is designed for students who prefer to deepen their understanding of a specific topic, and they will work on their thesis under the supervision of a SAIS faculty member. These students are encouraged to participate in one of the many summer schools in research methods, available via the European Consortium for Political Research.

Career Services

Students have also access to the Office of Career Services which focuses primarily on career planning and counseling for students. The office offers educational workshops each semester on a variety of aspects, including internship and job search strategies, as well as professional skills courses and career talks. During the year the Office of Career Services invites students, alumni and other guest speakers who have pursued successful careers in the private, public and non-profit sectors to share their experiences with the class. It also develops contacts with potential employers, primarily in Europe, to help students discover new internship and job opportunities. Annual career trips to destinations such as Brussels, Geneva, London, Vienna and Milan match students with SAIS alumni in the public, private and non-profit sectors.

Career Outcomes

MAGR graduates are specialized in the analysis of diverse aspects of risk across a wide spectrum (political, financial, environmental, military, cybersecurity etc.), the anticipation of consequences, and the evaluation of the appropriate response. One of SAIS's great strengths lies in firmly grounding its students in world history, politics and economics, often with a regional focus - areas where many MBA/Economics competitors fall short. The primary objective of the MAGR is to leverage SAIS's core strengths, whilst applying the analytical techniques required to understand and manage global risk factors in public policy and private-sector decision-making. Bologna provides the ideal base for those seeking employment in Europe, where many Johns Hopkins SAIS alumni occupy the highest ranks in policy-making, business, and nongovernmental organizations. MAGR graduates have the skills to adapt to a variety of roles in the public, private and non-profit sectors. Listed below are the sectors and companies which currently employ some of our MAGR graduates:

- The financial sector (financial services, asset management, rating agencies, banking and insurance) and the manufacturing and energy sector (political affairs, upstream/downstream, exploration); e.g. S&P Global Platts, Deloitte, Goldman Sachs, UBS Bank, Total SA.
- Consultancies (economic, managerial and political risk, environmental, public health, city planning, public affairs); e.g. Sia Partners, TD International-LLC, AKE Intelligence, Control Risks, Dataminr.
- International organizations; e.g. World Bank, NATO, United Nations
- Government; e.g. Australian Foreign Service, Swedish Foreign Trade Commission, US and Danish armed forces, Pacific Northwest National Laboratories (PNNL)

Faculty

MAGR courses are taught by Johns Hopkins SAIS faculty, renowned for their interdisciplinary approach to the study of economics, politics and history, and their innovative work in the field of risk and uncertainty. Their diverse areas of scholarship and practical experience bring a realistic and rigorous approach to the MAGR.

The MAGR is directed by Professor [Filippo Taddei](#), also the Director of the [Bologna Institute for Policy Research](#). Silvia Bersani is the Program's Administrative Coordinator, working with all other relevant administrative offices (Career Services, Development, Alumni Relations, Admissions & Recruitment, Student Affairs) to oversee and provide services to MAGR students.

Target applicants

Successful applicants are internationally-oriented, have previous professional experience (on average three years) and hold at least a bachelor's degree with a multidisciplinary background. The program is geared both towards applicants currently seeking a career transition, building on their previous work experience, and towards recent graduates in the Humanities and in the Social and Hard Sciences. The interaction between these groups of students is a unique characteristic of the MAGR program across the education market.

A selection of the professional backgrounds of some of the students enrolled in the MAGR program is provided below:

- Retired Major: founder private company in intelligence consulting
- Army Officer: Danish Army, U.S. Army and U.S. Airforce
- Senior Executive Assistant: consulting services to public sector clients, corporate intelligence firm
- Team Leader Intern: global risk management and specialist security consultancy
- Teacher: private education South Korea, private education Egypt
- International Trade Specialist: Italian Foreign Trade Agency
- General Counsel: insurance company, legal services
- Research Assistant: government, financial services
- Marketing Manager: food service, financial services

Tuition & Financial Support

SAIS administers a substantial amount of financial assistance available for enrolled MAGR students, based primarily on academic merit and financial need. In the academic year 2018-19 the tuition fee of the MAGR program is € 50,400 and all enrolled students requesting financial aid (80% of the entire MAGR class) have been awarded a financial package averaging € 20,000 each.

Students interested in applying for financial support must submit a request along with their application for admission.

The Johns Hopkins University - SAIS Europe

MAGR Curriculum AY 2019-2020

| Courses are grouped by principal area of concentration with cross-listings indicated in the columns to the right. | Credits | Areas of Study |
|---|---------|----------------|
| | | |
| SUMMER B | | |
| Microeconomic Risk and International Trade (<i>Plummer</i>) | 4 | Cohort |
| Introduction to Statistics (<i>Meucci</i>) | 4 | |
| Math Review for Risk Assessment (<i>Meucci</i>) | 2 | Cohort |
| FALL SEMESTER | | |
| Instability and Political Change in Consolidated Democracies (<i>J.Frosini/M. Gilbert</i>) | 4 | Cohort |
| Macroeconomic Risk and International Finance (<i>Taddei</i>) | 4 | Cohort |
| Fundamentals of Corporate Finance (<i>Carosi</i>) | 2 | Cohort |
| Risk in International Politics and Economics (<i>Jones</i>) | 4 | Cohort |
| Elective | 4 | Elective |
| SPRING SEMESTER | | |
| Quantitative Approaches to Risk Assessment (<i>Zicchino</i>) | 4 | Cohort |
| Strategic Foresight for Political Risk Analysis: Working with Scenarios (<i>Gabriel/Maull</i>) | 4 | Cohort |
| Elective * | 4 | Elective |
| Elective | 4 | Elective |
| * suggested: Conflict Risk and Stability in Cyberspace (<i>Wilcox</i>) | | |
| SUMMER A | | |
| Capstone Project | 6 | |

Courses and faculty are subject to change; some courses may be subject to limited enrolment.

Course Descriptions

Summer session

Microeconomic Risk and International Trade (Professor [Michael Plummer](#))

The aim of this course is two-fold. First, we study the microeconomic effects of incentives on the consumer and the producer and their relationship with efficiency. By developing a detailed analysis of the market system, the course provides the framework for policy intervention and the assessment of their effectiveness. Second, we develop an understanding of how the economy works at the aggregate level: the foundations for macroeconomic analysis explain how production, employment, prices and interest rates are jointly determined. By focusing on the economic interaction of individuals, the course develops the theoretical and empirical foundations required to analyze the various macroeconomic policies that affect economic activity.

Introduction to Statistics (Professor [Erika Meucci](#))

In order to understand and evaluate risk and uncertainty it is essential to have a strong command of basic statistical concepts and techniques. This course is designed to furnish students with the fundamental tools of statistical analysis, including analysis of descriptive statistics, probability distributions, statistical inference and related tests, correlation and conditional expectation. In addition to providing familiarity with statistical principles, the course will also include an introduction to basic statistical software packages, namely STATA and advanced tools in Excel. It is a required course for quantitative approaches to risk assessment.

Math Review for Risk Assessment (Professor [Erika Meucci](#))

This course develops the basic quantitative tools that are necessary for risk analysis. It gives a review of basic mathematical concepts used in economics and risk analysis, including pre-calculus and calculus principles. It also develops tools for data management using Excel. The course therefore provides students with a ready-to-use statistical toolbox that can be used during the remainder of the program.

Fall Semester

Instability and Political Change in Consolidated Democracies (Professors [Mark Gilbert](#) & [Justin Frosini](#))

The purpose of this course is to use a case study methodology to assess how even established democratic societies can rapidly become politically unstable. Again and again, we see nations that are regarded as successful and prosperous democracies descending into acute political turmoil. There is no one model to explain why such swift turnarounds in national fortunes occur (and nor could there ever be one), but by using the case study approach we can identify factors (ideological polarization, defective electoral systems, poor leadership, mistaken macroeconomic policy, constitutional paralysis, class or ethnic conflict, external shocks) that were capable of undermining stability. The presumption of this course, indeed, is that the management even of consolidated democratic societies is a constant struggle against the forces that tend to political dissolution. To this end, the course will examine democratic theory, constitutional law and two important case studies from British history to examine the causes of political change in consolidated democracies. The cases it looks at in detail are: The Rise to power of Margaret Thatcher, 1964–1979 and Brexit and its aftermath, 2016-7

Macroeconomic Risk and International Finance (Professor [Filippo Taddei](#))

This course highlights the economic sources of risk in the international arena. Different economies interact by trading goods and services and by exchanging progressively larger capital flows. In the age of globalization, the economic interdependence of countries generates highly novel challenges: exchange rates are not determined solely by capital movements, but also by the evolution of governance in the international monetary system – a system in which the Eurozone, the newest currency union, is emerging as a global and volatile player. The course develops a rigorous analysis of the different arrangements in the international financial system and their effects on trade direction and intensity and international capital flows. This approach allows us to address some of the most relevant sources of uncertainty in international economics: the future of gains from trade while new trade agreements are being discussed, the benefits of currency unification and the risks for sovereign debt, the heated debate regarding the relationship between global imbalances and the financial crisis of 2007-08 while capital accounts are becoming progressively liberalized.

Fundamentals of Corporate Finance (Professor [Andrea Carosi](#))

This course is an introductory course in finance. It serves two purposes. First it is an introduction to corporate finance and provides a framework for understanding and analysing investment and financial decisions of corporations. Second, it introduces topics in the investments area of finance that are important for the understanding of how prices are set and markets behave. The course is divided into four parts. The first part provides the basic knowledge and understanding of the firm, its financial statements and working environment together with standard tools to analyse future projects and firm performance. The second part introduces the main modern portfolio theories used as basis to properly price the cost of capital accounting for risk and exploit the risk return trade off. The third part applies the tools acquired in the previous two parts and considers the implications of different capital structures and how they can be used to create value in the firm. In addition, models, principles and measures to evaluate firm's performance and its ability to create value through time will be discussed. Part IV introduces the main risks the firm faces during its operating activities and project management. It presents basic financial techniques and strategies to hedge risk and ensure stable value creation.

Risk in International Politics and Economics (Professor [Erik Jones](#))

This is a course on social science research methods as they apply to decision-making under conditions of uncertainty. In other words, it looks at how the skills of a social scientist can be put to use in the 'real world'. The course begins by looking at how decision makers anticipate future events, it explores what evidence they consider and what they ignore, and it looks at the standard models they apply in projecting the future based on the present. The case studies applied in this early part of the course focus on seemingly straightforward economic and financial questions. The problem is that most of the predictions that were made in these areas ended in disaster. Hence the course turns to explore the bias that is built into estimates of the future to understand whether the problem lies in the way the world works or in how we try to understand it. It introduces students to a conceptual vocabulary based on systems theory to make it easier to build more

complex relationships into the analysis. And it explores the unintended consequences of policy decisions. Here the case studies move from economics to politics and from crisis to stagnation. This does not offer much of an improvement. Therefore the course makes a third analytic turn to bring the dynamics of human interaction more firmly into focus. It looks at negotiation, communication, and culture as possible sources of error or misunderstanding. The case studies focus on conflict, terrorism, and popular protest. By the end of the course students have a better grasp of where their predictions are likely to falter. They will also understand why such predictions must nevertheless be made. Risk in the international political economy derives from decision-making under conditions of uncertainty. The problem is that uncertainty is inevitable, but decisions must be made regardless of this.

Spring Semester

Quantitative Approaches to Risk Assessment (Professor [Lea Zicchino](#))

The classical approach to decision theory builds on a three-step iterative process: decision-makers assign probabilities to different possible outcomes, they generate welfare estimates depending upon the different outcomes (relative costs and benefits) for the decision-makers involved, and they calculate the expected values of different contingencies. The process is iterative in the sense that decision-makers reassess probabilities as they gain more information (it is Bayesian), they also make assessments as they learn more about the welfare implications for other important actors (it is game-theoretical), and they learn more about their own possibilities to control events (it is causal). The purpose of this course is to introduce students to the quantitative techniques used in each stage of this process. The course begins by exploring the assignment of probabilities both on the basis of prior assumptions and using more advanced techniques (like Monte Carlo simulations). It then shows how these probabilities can be updated in a Bayesian manner as a result of new information. It looks at how these probabilities can be fed into decision making with multiple actors (through game theory). And it concludes with techniques to evaluate the overall success of the decision-making process.

Strategic Foresight for Political Risk Analysis: Working with Scenarios (Professors [Hanns Maull](#) & [Johannes Gabriel](#))

The purpose of the seminar is a) to familiarize students with the scenario methodology as a way to think about uncertain futures, b) to do so by themselves developing scenarios on “The Middle East in 2025”, and c) to link the scenario techniques to risk assessment and strategic foresight.

Sample of Elective Courses

Basic Issues of Sub-Saharan Africa's Political Development (Professor [Winrich Kühne](#)), Fall term

Deals with basic issues, in particular root causes and dynamics of violent conflict in Sub-Saharan Africa, as well as the development of conflict management, and conflict resolution strategies. After a general introduction, selected case studies will explore these issues in their enormous complexity. Discusses basic problems of African politics and development, including the crisis of development, state failure, ethnicity as a potential source of conflict, war economies, and the relevance and problems of democratization as a means of conflict resolution.

Economic Survey of Latin America: Global Players or Market Strayers (Professor [Edmund Amann](#)), Fall term

This course examines the economics of Latin America in contemporary comparative perspective. Starting with an overview of long-term trends in growth and structural transformation, the course moves on to consider the theoretical approaches which economists have adopted to understand development processes in the region. The introductory phase of the course completed, the next three lectures survey the key macroeconomic themes of fiscal policy, monetary policy and the external balance. The difficulties countries in the region have faced in maintaining macroeconomic stability is an important theme of the course and is referred back to again and again in subsequent sessions. An equally important topic, poverty and inequality, forms the basis for the next section of the course. The remainder of the course deals with the challenge Latin America now faces as it struggles to compete in the global economy.

European Union: Integration and Disintegration (Professor [Michael Leigh](#)), Fall term

This course will focus on some of the main challenges facing the European Union. The course addresses three fundamental questions: 1) What drove European integration during its formative period and enabled such breakthroughs as the creation of the single market, the launch of the euro and enlargement from 6 to 28 member states? 2) What challenges have hindered the process of European integration and prevented it from achieving its full potential? This section of the course will focus on the single currency, neighborhood policy, energy union, migration, foreign policy, security, defense, migration and Brexit. It will examine the rise of euro-skepticism and populism and their implications for the future of "the European project." 3) Is the European Union headed toward further integration or disintegration? This question will be addressed through a scenario-building exercise.

Classes will involve lectures, discussions, presentations by guest speakers, debates, and a simulation of the Brexit negotiations.

Foreign Policy Analysis (Professor [Christopher Hill](#)), Fall term

This course aims both to introduce the subject of Foreign Policy Analysis to those who have not studied it before, and to allow those with some existing familiarity the opportunity to develop their understanding to an advanced level, and in particular to apply concepts to the countries and cases of their choice. It should also provide a good foundation for those intending to write their dissertations on any aspect of foreign policy or of decision-making. In making agency its main concern it provides an essential complement to courses in International Relations (usually the majority) which focus on structural or system-wide features.

Policies and Politics of the American Emergency State (Professor [David Unger](#)), Fall term

Compares the way Washington makes national security today with the very different arrangements for foreign policy, war-making and democratic accountability envisioned in the United States Constitution. The course is designed to provide students with a firm grounding in the Constitutional debates and language involving the carefully balanced powers of the Presidency and the Congress and the safeguards meant to protect civil liberties in wartime. It tracks the development of a security state mentality in the years since the Second World War and illustrates how this has radically changed America's view of its constitutional democracy, its global military role and its place in the international economy.

Conflict Risk and Stability in Cyberspace (Professor [Richard Wilcox](#)), Spring term

This course provides an understanding of the risks associated with political competition and conflict in cyberspace. The course is organized in three parts. Drawing on information studies, game theory and arms control, as well as on the conflict resolution literature, Part I aims to enable students to understand cyberconflict, analyze risk associated with state actions in cyberspace, and develop cyberconflict mitigation strategies. Having established a basis for analysis, Part II next examines risk mitigation strategies. Part III applies the historical knowledge and conceptual approaches studied in Parts I and II to key cyber conflict arenas. A course review concludes the seminar.

Econometrics (Professor [Christopher L. Gilbert](#)), Spring term

Provides a comprehensive introduction to econometrics. Develops tools for estimating functional relationships and critically reading empirical studies that use different econometric techniques; presents assumptions of multivariate regression and discusses the most common econometric problems, and the potential consequences and remedies; discusses omitted variables, sample selection, heteroscedasticity, autocorrelation, multicollinearity, and use of discrete variables. Introduces instrumental variable technique and two-stage least squares estimation.

Financial Derivatives and Risk Management (Professor [Emanuele Bajo](#)), Spring term

This course presents and analyzes financial derivatives, such as forwards, futures, and options and their use to hedge risks associated with changes in interest rates, stock prices, exchange rates and commodity prices (so called "market risks").

Prerequisites: Corporate Finance or permission from the professor.

Renewable Energy: Markets, Technologies & Projects (Professor [Marco Dell'Aquila](#)), Spring term

This course provides an overview of the renewable energy sector. Students will be exposed to all of the building blocks necessary to take a renewable energy project from concept to reality, spanning regulation, technical, project development and financing aspects. By necessity the topic is multi-disciplinary and also international in its scope. The course will provide a context for renewable energy projects in the wider energy debate. There will be a number of guest speakers who are experts in their field and will expose students to live projects.

Science, Technology and International Affairs (Professor [Kenneth H. Keller](#)), Spring term

This course will examine how science and technology (S&T) affect societies both domestically and in the political and economic relations among nations in such matters as relative economic strength, autonomy, security, environmental protection, cultural identity, global health, and international cooperation in research and development. These effects will be discussed conceptually and illustrated with examples from the current international scene. The course will also consider various approaches to national S&T policy and to negotiating international agreements in areas affected by S&T considerations.