BUCERIUS SUMMER PROGRAM
IN LEGAL TECHNOLOGY AND OPERATIONS 2019

COURSE CATALOGUE

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(updated: June 24, 2019)
ACADEMIC CALENDAR
JULY 1 – 19, 2019

Please note that this is a preliminary schedule and will be expanded and updated over the coming months.

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# LIST OF TOPICS

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<td>Innovation Diffusion in the Legal Industry</td>
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<td>Prof. Dr. Daniel Katz</td>
<td>Illinois Institute of Technology, Chicago-Kent College of Law, USA</td>
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<td>Introduction to Legal Operation: Getting More from In-House Legal Dep. and Their Outside Counsel</td>
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UNIT DESCRIPTIONS

CORE SESSIONS

COMPUTATIONAL LAW AND RULES-DRIVEN AUTOMATION
PROF. DANIEL LINNA JR.

Computational law concerns the mechanization of legal analysis. In this session, students will learn coding basics; learn to represent law, legal analysis, and agreements as explicit rules; and develop basic applications that automate the creation of documents and giving of advice upon the collection of variable inputs.

INNOVATION DIFFUSION IN THE LEGAL INDUSTRY
PROF. WILLIAM HENDERSON

The legal profession is gradually becoming part of a broader industry that encompasses both lawyers and sophisticated professionals from other disciplines. This structural shift is driven by the gradual adoption of innovations that are changing how legal problems are solved. The purpose of this session is to provide participants with a solid theoretical and practical grounding on the current state of the legal industry and where it’s likely headed over the next ten to twenty years. Participants will acquire a strong working knowledge of innovation diffusion theory, which is an interdisciplinary field that draws upon decades of research from sociology, anthropology, marketing, communications, geography, public health, education and various other disciplines. They will also have access to curated guest lecturers who work on the cutting edge of legal innovation. Participants who complete all of the requisite work will see a wider array of career opportunities and be better positioned to weigh their professional options.

The structure of this session will rely heavily on team-based learning, which closely resembles the work environment of many new emerging businesses. The assessment will be based on a combination of individual preparation, teamwork product, active class engagement and individual contributions to team performance.

LEGAL ANALYTICS AND ARTIFICIAL INTELLIGENCE
PROF. DR. DANIEL KATZ

Participants will receive an introduction to the emerging fields of Legal Analytics and Artificial Intelligence. The session will begin with a brief history of artificial intelligence and artificial intelligence + law. Then, we will turn our attention to data driven applications of such methods. Our goal is to introduce participants to understand the process of extracting actionable knowledge from data, to distinguish themselves in legal proceedings involving data or analysis, and to assist in firm and in-house management, including billing, case forecasting, process improvement, resource management and financial operations. Participants will review real world use cases including those involving prediction, risk management and operations. They will also explore how to communicate data driven insights to a non-technical audience through visualization and user interfaces.
UNIT DESCRIPTIONS

LEGAL OPERATIONS
GLORIA SÁNCHEZ SORIANO

Technology is changing the way we provide and receive legal services. New approaches and new tools are completely reshaping the legal profession. With a practical and participative approach, we will go through many questions, such as: How can we approach the transformation process from an in-house department? What is a transformation process like? What strategies shall we put in place to succeed? How can we involve our teams and make them not only participants in the process, but also real innovators?

SUPPLEMENTARY LECTURES

DATA ANALYSIS AND VISUALIZATION
JAE UM

The digitization of life is accelerating the explosive increase of available data about the world around us. Data-informed decision-making is now an imperative for all business across sectors and markets. Meanwhile, the pace and complexity of the attention economy is challenging lawyers to communicate in new and different ways.

This session will focus on the intersection of data analysis and visual communication. Our goal will be to expose participants to practical methods in exploratory analysis, insight generation, and visual presentation. The session will rely on interactive exercises with small data sets to expose participants to best practices in the design of charts, graphs, and data visualization.

HANDS-ON NETWORK ANALYSIS IN LAW
DR. CORINNA COUPETTE

Networks are everywhere. Lawyers use them to get to work (infrastructure networks), to seek advice (social networks), and to do research (information networks). They craft them (citation networks), oversee them (financial networks), and fight them (criminal networks). Upon closer inspection, almost anything can be modeled as a network: a collection of entities, combined with a collection of relationships between those entities. Legal network science studies how legal phenomena can be represented as networks and investigates what we can gain from their quantification and visualization.

This session introduces the network perspective on law and teaches the basics of legal network science. You will learn the theoretical fundamentals of legal network analysis and quickly “get your hands dirty” with legal data, constructing and analyzing your own legal networks using Python. You will discover the potential as well as the practical pitfalls of legal data analysis and discuss how to leverage relational data to improve legal practice.
UNIT DESCRIPTIONS

TALKS & DISCUSSION SERIES

INTRODUCTION TO LEGAL OPERATION: GETTING MORE FROM IN-HOUSE LEGAL DEPARTMENT AND THEIR OUTSIDE COUNSEL
DIRK HARTUNG

Powerful forces are reshaping the corporate legal advice market, including price pressure from clients and the digitization of legal data. Legal technology solutions can help law firms succeed in this new era, but only if they understand the tech landscape and redefine key elements of their business model.

Mapping the Legal-Tech Landscape

The legal-tech landscape comprises three solution categories: enabler technologies facilitating the digitization of legal data, support-process solutions infusing new efficiencies into case-management and back-office work, and substantive law solutions supporting or replacing lawyers in executing core legal tasks in transactions and litigation cases.

Legal Tech’s Impact—Today and Tomorrow

While legal tech began with the automation of standard legal tasks, it’s moving toward supporting more bespoke, specialized activities performed by lawyers. It’s also capitalizing on opportunities presented by big data analytics, helping lawyers capture valuable insights from large data sets.

Next Steps for Law Firms

To safeguard their market share and profitability in a market transformed by legal tech, law firms must rethink two elements of their business model: their value proposition (including their service offerings and revenue model) and their operating model (including their cost structure and organizational structure). The right decision for each element will differ for “big law” and “small law” firms that focus on standardized cases.

Legal Tech’s Impact on Individual Roles and Legal Education

In the future, the business of law will require fewer general support staff members, junior lawyers, and generalists—and more legal technicians and project managers. Accordingly, law schools may need to offer courses on legal tech and case-management processes. Law firms can offer on-the-job training to help lawyers leverage legal-tech solutions and executive-education programs focused on legal-tech literacy.

FROM LAW FIRMS TO LAW COMPANIES (WORKING TITLE)
LIAM BROWN

In this session, you will discuss the evolution of law departments, law firms and the emergence of law companies.
UNIT DESCRIPTIONS

DIGITAL TECHNOLOGIES AND ACCESS TO JUSTICE
DR. RIIKKA KOULU

This core session delves into the nuanced world of conflict management and provides an overview of digitalization of dispute resolution. New ways of organizing dispute resolution are continuously sought from technology but it is still unclear how different applications will in fact impact conflict management inside and outside the courts. Will robots replace human judges in courts in the near future? What is the impact of deep learning or AI software on the tasks of a litigation lawyer? What happens to due process when dispute resolution is automated? Is legal technology the solution for fiscal sustainability or the detriment of due process? This core session provides answers to such questions primarily from European perspective.

During the session, participants gain comprehensive introduction to dispute resolution and tools for critical assessment of both the potential and the threats associated with dispute resolution technology. By focusing on the ethical dimension of dispute resolution technology, the session provides knowledge on how to use, implement, and design dispute resolution technology in a sustainable and fair manner. Themes covered in the session include e.g. courtroom technology and electronic evidence, e-arbitration and online dispute resolution, conflict prevention and access services, decision support tools and algorithmic decision making. The core session includes a workshop where participants work together in teams to develop new solutions for the pitfalls of existing resolution models.

THE MARKET FOR LEGAL SERVICES
MARKUS HARTUNG

"Legal Tech" is a complex phenomenon and sometimes just a simple term summarizing all the changes occurring at the moment. Law Firms do their best to navigate through these turbulent times. As the legal profession was—and is still—a very traditional “industry” struggling with terms like “legal business” or “delivery of legal services,” many market participants just don’t know how to get a grip on what’s usually referred to as “digital transformation.” Technology seems to attack the business model of law firms in a way that leaves no safe places.

In his lecture, Mr. Hartung analyzes the impact of the digital transformation and technology on law firms and in-house legal departments. At the moment, the latter tend to lean back and relax because they consider this to be a "law firm only" issue. Getting closer, the outlines become clearer and show a completely new design of what we at Bucerius call the "management of the legal function and risk management." This will have an impact on the legal industry as a whole—in-house and in private practice.
KEYNOTE LECTURE

LEGAL TECH - OPPORTUNITIES AND RISKS
PROF. DR. WOLFGANG HOFFMANN-RIEM

In connection with digitalization, algorithms are technical rules that are increasingly competing with law as a means for controlling behavior. They can support, modify, or thwart the validity of law. In combination with the opportunities associated with artificial intelligence, algorithms are particularly important with respect to the handling of big data.

The aim of prescriptive analytics is to create strategies in order, e.g., to influence attitudes, behaviors, and social developments; with the ability to influence individual behavior and the way public opinion is formed, they offer considerable potential for manipulation.

This lecture addresses the special features of the types of rules and of the process for generating and applying technical and legal rules. In contrast to law that is enacted and applied at the sovereign level, the development and use of algorithms by private actors, particularly globally operating enterprises, is generally not the result of a process that is governed by the rule of law, nor is it one that is usually transparent and subject to public scrutiny.

The session concludes with an overview of suggestions on how the opportunities associated with digitalization can be exploited without jeopardizing fundamental freedoms and the realization of other interests in the common good.
FACULTY BIOGRAPHIES

ACADEMIC DIRECTORS

Dirk Hartung is Executive Director of Legal Technology at Bucerius Law School. After five years at a renowned boutique firm for Press and Media Law, he joined his alma mater in 2014 as a member of the management team. His research focuses on legal technology and data science in law as well as technology education for students and legal professionals. He teaches Machine Learning in Law and is a co-founder of the European Legal Tech Association and the Hamburg chapter of Legal Hackers.

Daniel M. Katz is a scientist, technologist and law professor who applies an innovative polytechnic approach to teaching law—to help create lawyers for today’s biggest societal challenges. He is the Director of The Law Lab at Chicago-Kent College of Law (Illinois Institute of Technology). Both his scholarship and teaching integrate science, technology, engineering and mathematics. Professor Katz teaches Practice & Professionalism, E-Discovery, Legal Analytics, Legal Project Management + Legal Process Improvement and Civil Procedure at Chicago-Kent.

ACADEMIC ADVISORY BOARD

The quality of lecturers and academic rigor of class sessions is ensured by an academic advisory board. Members of the board include Bucerius Dean Prof. Dr. Katharina Boele-Woelki, Prof. Dr. Michael Fehling, Markus Hartung and Prof. Dr. Wolfgang Hoffmann-Riem.

FACULTY

Liam Brown has spent over twenty years providing consulting, technology and services to law firms and Global 1000 corporate legal departments. As an advisor and consultant, he has guided law firm leaders and general counsel through a variety of strategic decisions focused on improving effectiveness and efficiency.

In 2011 he founded Elevate, a next generation legal service provider with the mission to help law firms and corporate legal departments operate more effectively. Previously he was the Founder, President and CEO of Integreon, Inc., which he led from startup in 2001 to annual sales of nearly $150 million by 2011, before he sold his stake to private equity investors in order to launch Elevate.

Dr. Corinna Coupette Corinna Coupette is a researcher at the Max Planck Institute for Informatics in Saarbrücken and a member of the Otto Hahn Group at the Max Planck Institute for Comparative and International Private Law in Hamburg. Her legal research focuses on modeling and data analysis for legal and technological networks.
FACULTY BIOGRAPHIES

She wrote her doctoral thesis in law on Legal Network Science and its applications to German Law. In the course of her research, she constructed an original network data set from decisions of the German Federal Constitutional Court.

An aspiring computer scientist, Corinna teaches Programming at Bucerius Law School and serves as a tutor in Data Networks at the University of Saarbrücken. She studied Law at Bucerius Law School and Stanford Law School and obtained her B.Sc. in Computer Science from LMU Munich. Corinna is currently pursuing her M.Sc. in Computer Science at the University of Saarbrücken and her Ph.D. in Computer Science at the Max Planck Institute for Informatics in Saarbrücken.

Markus Hartung is a lawyer and mediator, as well as Director of the Bucerius Center on the Legal Profession (CLP). He has broad experience in leading law firms, serving as a member of the Global Executive Committee and German Managing Partner of Linklaters (and its predecessor firm) from 1999 through 2008.

Markus is a chairman of the Committee on Professional Regulation of the German Bar Association (DAV).

At the CLP, he is responsible for the conception of educational and continuing education programs for legal professionals. His expertise in the framework of the CLP lies in market development and trends, management and strategic leadership as well as corporate governance of societies. He regularly holds public lectures on these topics.

William Henderson ("Bill") is on the faculty at Indiana University Maurer School of Law, where he holds the Stephen F. Burns Chair on the Legal Profession. Since joining the faculty in 2003, Professor Henderson has taught several business course, including Business Association, Securities Regulation and Business Planning. In connection with his research, which focuses on the empirical analysis of the legal profession and legal education, he has also developed and taught courses on project management, law firms economics, leadership and professional responsibility combined with lawyer development.

Bill's academic work has appeared in leading legal journals, including the Stanford Law Review, the Michigan Law Review, and the Texas Law Review. Bill also regularly publishes articles in The American Lawyer, The ABA Journal, and The National Law Journal. His observations on the legal market and legal education are also frequently quoted in the mainstream press, including the New York Times, Wall Street Journal, Los Angeles Times, Atlantic Monthly, The Economist, and National Public Radio. Based on his research and public speaking, Bill was included on the National Law Journal's list of The 100 Most Influential Lawyers in America (compiled every ten years). In 2015 and 2016, he was named the Most Influential Person in Legal Education by The National Jurist magazine. In 2009, Henderson was named a "Legal Rebel" by the ABA Journal.

In 2010, Bill co-founded Lawyer Metrics, an applied research company that helps lawyers and law firms use data to make better operational and strategic decisions. Lawyer Metrics (now LawyerMetrix) was acquired by AccessLex Institute in 2015. In 2017, Bill founded Legal Evolution, an online publication that chronicles successful innovation within the legal industry.
**FACULTY BIOGRAPHIES**

**Wolfgang Hoffmann-Riem** is an affiliate Professor of Innovation and Law at the Bucerius Law School, Hamburg. He is Professor Emeritus of Public Law and Public Administration at the University of Hamburg.

Prof. Hoffmann-Riem was the head of the Justice Department (Senator) of the State of Hamburg as well as chairman of the Committee on Law of the German Bundesrat from 1995 - 1997 and, between 1999 and 2008, was a Justice of the German Constitutional Court. His field of responsibility as a rapporteur included – inter alia – the protection of privacy and data, freedom of speech and information as well as the inviolability of the home.

At the University of Hamburg he founded and chaired the Centre for Research in Law and Innovation (1995 – 2012). Prof. Hoffmann-Riem has been the German member of the European Commission for Democracy through Law (Venice Commission) of the Council of Europe since 2007.

**Daniel M. Katz** is a scientist, technologist and law professor who applies an innovative polytechnic approach to teaching law—to help create lawyers for today’s biggest societal challenges. He is the Director of The Law Lab at Chicago-Kent College of Law (Illinois Institute of Technology). Both his scholarship and teaching integrate science, technology, engineering and mathematics. Professor Katz teaches Practice & Professionalism, E-Discovery, Legal Analytics, Legal Project Management + Legal Process Improvement and Civil Procedure at Chicago-Kent.

**Dr. Riikka Koulu** (LL.D. trained on the bench) is an assistant professor of Law and Digitalization at University of Helsinki. She is also the director of the Legal Tech Lab, an interdisciplinary research hub that focuses on legal digitalization. She completed her doctorate on dispute resolution technology exploring technology-enabled privatization of coercion. In her post-doc projects, she examines different facets of automation and digital technologies on legal practices, e.g., algorithmic fairness and transparency processes, conflict management in digital environments and decentralized ledger technologies. The Legal Tech Lab’s work currently focuses on algorithmic decision making in government, foundations of legal digitalization and the challenges of AI techniques for legal work.

**Daniel W. Linna Jr.** is a visiting professor (2018-19) at Northwestern University’s Pritzker School of Law, an adjunct professor at the University of Michigan Law School and a member of the affiliated faculty at Codex – The Stanford Center for Legal Informatics. Previously, Dan was an equity partner in the litigation department at Honigman Miller Schwartz and Cohn, an Am Law 200 firm headquartered in Detroit. He was a member of Honigman’s Automotive and Manufacturing; e-Discovery and Information Management; Commercial Transactions; and Social, Mobile, and Emerging Media groups. Before law school, he was an information technology manager, developer, and consultant.
FACULTY BIOGRAPHIES

Dan is the co-founder of and lead organizer for the Detroit and Chicago Legal Innovation & Technology meetup groups. He was named to the 2015 Fastcase 50 as a person who has charted a new course for the delivery of legal services. Dan is Vice Chair of the Legal Analytics Committee of the ABA Business Law Section.

Gloria Sánchez Soriano is Head of Transformation of Banco Santander Legal Department. She is in charge of innovation and strategy of the legal area. She commenced her legal career at Clifford Chance Madrid, and after some years advising clients in different transactions, she joined Banco Santander legal department. Before her current post, she has been head of legal for real estate, equity participations and portfolio sales at Banco Santander. She has been a professor of corporate law at Carlos III University in Madrid and at present, she is an adjunct professor at IE Law School and IE Architecture & Design School. Her experience covers real estate transactions, project finance, M&A, together with legal tech, strategy and innovation.

Jae Um is a strategy executive, insights analyst & business designer for fast-changing legal markets, with over a decade of industry experience. Jae currently serves as the Director of Pricing Strategy for Baker McKenzie worldwide. She is also a contributing author to Legal Evolution, American Lawyer, and other publications covering the legal industry. Jae is also the founder of Six Parsecs, a market insights company focused on the legal vertical. Prior to her current roles, she served in a progression of high-impact roles in client service innovation & strategic growth at Seyfarth Shaw.