

University of New South Wales Law Research Series

**UNSW LAW MINI-CURRICULUM REVIEW
REPORT ON TECHNOLOGY AND THE LAW
SCHOOL CURRICULUM**

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UNSW Law Mini-Curriculum Review
Report on Technology and the Law School Curriculum

2 November 2017

UNSW Law Mini-Curriculum Review (MCR)

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Executive Summary

The MCR recommendations/findings are that:

1. the Law School add to the 8 existing cross-cutting themes that were adopted in response to the 2010-2013 Curriculum Review a further theme: “technological innovation and its impact on legal practice, law and society”. This is to encourage all academic staff to consider how technology may affect the content of their existing courses.
2. the Associate Dean – Education (a) investigate the availability of resources to assist core course convenors to address the new cross-cutting theme in core courses; and (b) fund a project officer to liaise with core course convenors to obtain information as to how the new cross-cutting theme is addressed in core courses.
3. the project officer report to the Associate Dean – Education on how each core course addresses the new cross-cutting theme by August 2018. The Associate Dean – Education to report these findings to the Qualifying Degrees Committee.
4. the Law School currently offers a range of outstanding courses that address the legal, ethical and policy issues presented by the use of technology in business, government and society. However there are some gaps in the UNSW Law offerings that may be addressed through new electives that should be developed in a coordinated manner amongst law school academics.
5. the Law School offer (or continue to offer) the following technology related electives:
 - Law Apps course – addressed through LAWS3196 / JURD7596 “Designing Technology Solutions for Access to Justice” which was offered for the first time in semester 2, 2017.
 - Startup Law – no course at present.
 - FinTech and RegTech - UNSW Law will offer LAWS8174 Financial Law and Regulation in the Age of FinTech to postgraduate and JD students in 2018.
 - Legal Practice, Ethics and Technology course - no course at present.
 - Introduction to Coding / Introduction to Computer Programming - no course at present.

6. the Law School recognise that the advent of technology also requires the development of other skills, which in turn requires opportunities within the law curriculum for students to obtain those skills, namely:
 - Emotional Intelligence – as part of courses requiring collaboration and group work.
 - Legal Project Management – as part of clinics and internships, but possibly also as a postgraduate course.
 - Legal Analytics – as part of existing courses dealing with technology or as an elective course.
7. the Law School work with the student Law Society and other student groups to support extra-curricular activities that develop skills and experience with technology and related areas. In particular, a Law hackathon should be institutionalized.
8. the Law School and its academic staff adopt an approach of continuous improvement in relation to the inclusion of technology and contemporary examples of contexts in the curriculum through the continued, incremental enhancement and development of courses to take account of rapid technological change.
9. the Law School provide opportunities for academic staff to learn about technological developments that impact their areas of teaching.

Terms of Reference

The terms of reference of the review are as follows:

The Curriculum Review Committee should report and make recommendations on changing our LLB and JD curriculum and teaching methods:

1. to move in 2019 to the UNSW 3+ calendar;
2. to better integrate law and technology perspectives and methods; and
3. to respond to any issues that have arisen out of the last curriculum review process.

In answering these questions, the Curriculum Review Committee should provide broad opportunities for staff involvement. The committee should report by 1 July 2017.

The membership of the MCR is set out in annexure 1.

This report deals with the second topic in the terms of reference only. The report also concentrates on addressing the impact of technology on substantive course content, rather than using technology in teaching. This is because the use of technology to improve teaching is being examined and developed on a continuous basis by the UNSW Law education design team and as part of the Learning and Teaching Seminar Series. Further, the use of technology in teaching is the subject of the UNSW Inspired Learning Initiative which seeks to achieve a considerable uplift in digital capability, from enhanced integration of media and technology and a redesign of courses to incorporate more digital learning.

Background

1. Technology For Legal Practice

Technology is a tool that the practicing lawyer needs to be able to use competently and thoughtfully. This ability may in turn allow the lawyer to focus on their core skills as advisor and advocate. There will be two main uses of technology. First is back office uses of technology which allow lawyers to run their own practices.¹ Second is client service applications where some or all of the legal service provided is through technology² For example document review in corporate transactions and litigation where the lawyer will need to be aware of the range of approaches.³ As technology improves, more and more components of the legal service will have a technological aspect, such as legal research and risk or outcome prediction. The former is being revolutionised by expert systems and artificial intelligence that can search law sources and answer questions. The latter is informed by big data and data analytics which can predict litigation outcomes or risk of legal contraventions.⁴ It is important to note that the lawyer is still part of the legal process.

However, there is also likely to be areas of current practice where technology will replace the lawyer and the client-consumer will deal with the technology directly. Developments such as the commoditisation of areas of legal practice raise for consideration how students can be equipped to be able to function in, or create, such a legal services market. There is also a range of new ways to provide legal information, including through the cloud and smartphone app. Some legal services may disappear, others will be completely automated so that they can be provided at a fraction of the current cost, and new areas of law and practice will arise.

For the law student seeking to be a legal practitioner the aptitude needed involves a number of elements. The lawyer needs to understand technology sufficiently to be able to identify technology that should be employed in any given situation because it is the more efficient way to proceed. It will achieve the client's objective or obligation in a cost-effective manner. To do this the lawyer must understand what the technology does. They do not need to create the technological solution, or have the skills to create it, rather they need to be able to use it. The Law Society of NSW's Future of Law and Innovation in the Profession (FLIP) report stated that "Being at least technology-literate, and preferably

¹ See Center for the Study of the Legal Profession, Georgetown Law School and Thomson Reuters, *2017 Report on the State of the Legal Market* (2017) 15 discussing law firm changes to allow the calculation of the cost of the services they provide.

² In the US the ABA Model Rules of Professional Conduct now provide in the Comment on Rule 1.1 [8]: "To maintain the requisite knowledge and skill, a lawyer should keep abreast of changes in the law and its practice, including the benefits and risks associated with relevant technology, engage in continuing study and education and comply with all continuing legal education requirements to which the lawyer is subject."

³ The approach to document review has developed from keyword searches to concept searches to predictive coding. In the area of predictive coding a number of different proprietary software programs exist.

⁴ See George Beaton and Imme Kaschner, *Remaking Law Firms* (American Bar Association, 2016) 188-198.

having some hands-on ability with technology were a central focus of representations to the Future Committee".⁵

To be able to use the technology the lawyer also needs to comprehend the output of the technology. For example, technology assisted review for discovery in litigation requires statistical literacy and quantitative skills⁶ ie the ability to understand, apply and infer from data. It will be crucial to interpreting outcome prediction software. The lawyer will also need to be able to challenge or critique the results of the technology, such as looking for biases or reliance on incomplete data.⁷ The lawyer may be able to obtain assistance in comprehending and critiquing from data scientists who will have advanced mathematics and statistical skills. However the lawyer still needs to be able to communicate with and understand these experts.

Lawyers also need to be aware of the risks that accompany technology and the need for appropriate cyber security.⁸ The Australian Cyber Security Centre 2016 survey found that 86% of organisations surveyed experienced attempts to compromise the confidentiality, integrity or availability of their network data or system and 58% experienced at least one successful compromise of data and/or systems.⁹ The risk can be mitigated through the implementation of appropriate cyber security measures. Law students need to be aware of the risks and the protective measures that they individually can adopt.

2. New Careers for Law Students

Traditionally it has been the view that we have two categories of students: those who seek to become legal practitioners (admitted to practice) and those who pursued non-law careers. Technology impacts on what those who seek to become legal practitioners (admitted to practice) need to know as explained above.

However, in the future there is likely to be a third path, the law-related occupation which may include:

- entrepreneurs leading legal disruption,
- knowledge management counsel,
- legal solutions architects,
- legal data scientists,
- legal project managers, and
- commoditized legal service assistants.

⁵ The Law Society of New South Wales, *The Future of Law and Innovation in the Profession* (2017) 77.

⁶ Predictive coding is the application of machine learning to the process of discovery. It is a process which uses statistical modelling to make predictions about the relevance of documents in discovery in lieu of human review. See Thomas Davey and Michael Legg, "Predictive Coding: Machine Learning Disrupts Discovery" (2017) 32 *Law Society of NSW Journal* 82.

⁷ See eg Aylin Caliskan, Joanna Bryson and Arvind Narayanan, "Semantics de-ri-ved automatically from language corpora contain human-like biases" (2017) *Science* 183.

⁸ Julie Sobowale, "Law firms must manage cybersecurity risks", *ABA Journal*, 1 March 2017.

⁹ Australian Cyber Security Centre, *2016 Australian Cyber Security Centre Survey* (2017) 31.

Stanford Law School's LegalTech Index as at 6 October 2017 listed 732 companies across the globe developing and selling technology for the legal market.¹⁰

Some predict these careers will substantially outnumber traditional lawyer roles.¹¹ US law schools have started to describe these (and other positions) as JD advantage roles – careers that do not require admission to practice, a current practicing certificate, or involve practicing law, but for which a law degree is a demonstrable advantage in obtaining or performing the job.¹²

The new law-related occupations raise important questions for legal education: Do law schools seek to educate students for these law related occupations? Or will this be done by other faculties/institutions? If law schools seek to educate students to perform law related occupations, does that require a curriculum that is different from that to educate potential legal practitioners, not just different electives but a different core? Will law schools differentiate themselves by focussing on education for legal practitioners only, or some or all law related occupations only, or both?

This report proceeds on the basis that UNSW Law should seek to educate its students in a manner that allows them to pursue a wide-range of careers, but that central to this objective is an excellent grounding in black-letter law areas of knowledge. To identify problems in current areas of law and legal services (ie failure to provide access to justice) and appreciate the advantages that technology may provide one needs to have studied the current system of law and legal services.

3. Changing Student Knowledge

While the providers of legal education and the legal profession need to equip new lawyers with the above skills it must also be remembered that the knowledge of students entering law school is also changing. Information and Communication Technology (ICT) is one of seven general capabilities in the Australian curriculum and is taught throughout students' pre-university schooling.¹³ The Australian Curriculum Assessment and Reporting Authority (ACARA) has developed a Digital Technologies curriculum from Foundation to Year 10.¹⁴ The achievement standard for Year 10 includes "students explain the control and management of networked digital systems and the security implications of the interaction between hardware, software and users. ... Students plan and manage digital projects using an iterative approach. ... Students design and evaluate user experiences and algorithms. ... They take account of privacy and security requirements when selecting and validating data. ... They share and collaborate online, establishing protocols for the use, transmission and maintenance of data and projects".¹⁵

¹⁰ <https://techindex.law.stanford.edu/>

¹¹ Richard Susskind, *Tomorrow's Lawyers* (Oxford University Press, 2d ed 2017) Ch 13.

¹² http://www.nalp.org/jd_advantage_jobs_detail_may2013

¹³ <http://www.australiancurriculum.edu.au/generalcapabilities/overview/introduction> The other capabilities are: Literacy, Numeracy, Critical and Creative Thinking, Personal and Social Capability, Ethical Understanding and Intercultural Understanding.

¹⁴ <http://www.australiancurriculum.edu.au/technologies/digital-technologies/curriculum/f-10?layout=1> See also <http://www.digitalcareers.edu.au/teachers/>

¹⁵ <http://www.australiancurriculum.edu.au/technologies/digital-technologies/curriculum/f-10?layout=1>

Further, students will enter law school with significant skills in technology as well as related knowledge such as security and privacy, and complementary skills such as collaboration and project management.

This has at least two ramifications for the law curriculum. The up skilling needed in relation to technology now, may only last 5 or so years, until secondary education fills that skill gap. However, the general skills learnt through secondary education still need to be directed to, and honed for, use with legal information and the practice of law.

4. Law and Technology

Legal education should include opportunities to reflect on the ethical, legal and social implications of increasingly prevalent technologies. Law students need to be trained in critical thinking about technology so that future legal professionals and judges remain appropriately sceptical about what precisely new technologies offer them and where their limitations lie. Critical legal thinking, enhanced by a sufficient technical understanding, is the best protection against unfair applications of risk assessment tools and poor applications of blockchain technology. We need lawyers to appeal against inappropriate uses of data analytics and expert systems in government decision-making and we need them to retain core rule of law values in the face of pressures to enhance efficiency in dispute resolution. The challenge is to deliver the depth of education that will equip our students to protect their clients' rights and interests in an increasingly automated world. The point is not to give them fixed ideas on today's technologies, but to equip them to understand how changing technology affects lawyers and their clients and give them the technological literacy and critical thinking skills to navigate the questions lawyers should be asking today and into the future.¹⁶

5. Consultation with UNSW Law staff

The MCR sought input on technology and its ramifications for the law curriculum through:

(a) an online survey that was open from 3 to 24 April 2017 which posed the following questions:

Q1 What courses/topics do you teach that prepare students for using technology as a graduate (including in legal practice)?

Q2 What courses/topics do you teach on the impact of technology on society, commerce or law?

Q3 What technology do you use in your courses? Please select all that apply.

Q4 What topics dealing with technology would you like to see included in UNSW Law's core courses?

Q5 What topics/courses dealing with technology would you like to see included in electives, including clinics and internships?

¹⁶ Lyria Bennett Moses, 'The Need for Lawyers', Australian Academy of Law and Australia Law Journal - The Future of Australian Legal Education Conference, Federal Court of Australia, Sydney, 13 August 2017.

(b) the discussion of the proposed recommendations and brainstorming session at the Law Retreat on 16 August 2017.

Recommendations

1. Technology – A New Theme (Recommendations 1, 2 and 3)

The 2010-2013 curriculum review introduced the idea of cross-cutting themes.¹⁷ The MCR report recommends adding a new theme – technology.

All academic staff need to consider how technology may be taught in their courses. This is of particular relevance to the core courses where students need to be thinking about how law and technology interact. This may mean considering the relevance of the following topics to existing courses:

- protecting personal information (privacy), commercially sensitive or proprietary information
- technology for policing, cybercrime
- new sources of evidence, such as social media, Internet of Things etc
- role of AI and expert systems in how governments and legal institutions make decisions about health and safety, criminal enforcement, sentencing and national security
- online dispute resolution
- smart contracts
- distributed ledger technology
- e-commerce
- data analytics

It may also include giving students hands on experience with, or providing a demonstration of, the various forms of technology.

2. Electives (Recommendations 4 and 5)

Law and Technology Courses – “Most law schools have courses and other activities that address the rich fabric of legal, ethical and policy issues presented by the use of technology in business, government and society.”¹⁸ UNSW Law is no exception. It offers a range of these types of courses such as LAWS3131 / JURD7331 “Information Technology Law”, LAWS3346 / JURD7546 / LAWS8346 “Law and Technology: Comparative Perspectives (Zurich)” and LAWS3066 / JURD7566 “Criminal Threats from Cyberspace” and LAWS8030 “Cybercrime, Security and Digital Law Enforcement”. Technology is also a crucial component of electives dealing with consumer protection, intellectual property and media law. UNSW Law also has centres that address technology and which provide internship opportunities for students, such as Australasian Legal Information Institute (AustLII), Cyberspace Law & Policy Community and the National Children's & Youth Law Centre.

¹⁷ UNSW Law, *Curriculum Review* (2013) 30-31, 53-90. The themes were (1) Indigenous legal issues, (2) Human rights, justice and the rule of law, (3) Gender, class, race and disability, (4) Environmental issues, (5) International, interdisciplinary and comparative perspectives, (6) Corporate and commercial issues, (7) Personal and professional development and ethics, and (8) Experiential learning.

¹⁸ Richard Granat and Marc Lauritsen, ‘Teaching the Technology of Practice: The Top 10 Schools’ (2014) 40 (4) *Law Practice* 44, 45.

The above courses and centres are expressly referred to in this report to ensure that the reader does not think that they were overlooked when the suggestions below are put forward. It is essential that UNSW Law continues to teach (and research) the legal, ethical and policy issues presented by the use of technology in various areas of society. Indeed, many of the existing courses and centres may be able to fruitfully interact with the electives suggested below.

Law Apps Courses - Georgetown University Law Center in Washington pioneered an elective course where teams of students are assigned to work with legal services organisations and, using software packages, build an application which will assist in access to justice. The course culminates in the Iron Tech Lawyer contest where the applications are judged by a panel of external experts.¹⁹

This model has been adopted by some law schools in Australia. Melbourne Law School ran its Law Apps elective for the first time in semester 2, 2015. The course requires students to design, build and release a live legal expert system that can provide legal information to non-lawyers. UNSW Law ran its Law Apps course, LAWS3196 / JURD7596 “Designing Technology Solutions for Access to Justice” for the first time in semester 2, 2017.

The opportunity to create legal expert systems could also be included in existing UNSW Law centres and clinics as they seek to adapt their offerings to take account of advances in technology.

Startup Law - This elective aims to provide students with the legal skills to advise start-up entities or entrepreneurs on the legal issues they are likely to face in their formative years, such as tax, intellectual property, business structures (partnership, joint venture, incorporation), profit or not-for-profit, corporations law and employment law. These types of courses have been prevalent in the United States for some time, having originated in response to the dot.com boom, but are now experiencing a resurgence. In 2017 Melbourne Law School offered this type of course for the first time.

The start-up culture that has started to permeate law due to technology giving rise to new products and services also provides an opportunity for clinics where law students are given the opportunity to work with budding entrepreneurs and experienced lawyers to advise on corporate structures, tax, employment and intellectual property issues relevant to new businesses.²⁰ The clinic takes the student beyond learning the relevant substantive law and gives them exposure to clients which develops interviewing and counseling skills. Start-up clinics can also operate in conjunction with technology incubators.

This type of course could be run in conjunction with other UNSW faculties and law firms. For example UTS course 94682 “Launchpad” is being run in conjunction with Corrs Chambers Westgarth.²¹

FinTech and RegTech – FinTech is an amalgamation of the words “financial” and “technology”. It refers to the use of new technologies in the financial services industry to improve operational and customer

¹⁹ An explanation of the course is provided at <https://www.youtube.com/watch?v=ipVpjtOEyA8>.

²⁰ See eg Technology Startup Clinic at University of California – Hastings; Tech Startup Clinic at Cardozo Law School; Start Up Ventures Clinic at Duke Law School and Entrepreneurship Clinic at University of Michigan Law School.

²¹ Melissa Coade, Firm caters for uni start-ups to gain innovation edge, *Lawyers Weekly*, 5 October 2017.

engagement capabilities. RegTech (like FinTech) is a contraction of the terms "regulatory" and "technology." It refers to the application of technology to regulatory matters to assist financial institutions to meet their compliance and reporting obligations. The term can also be applied to technology being used by regulators to assist in monitoring compliance and gathering evidence for enforcement. The finance and regulatory industries draw on developments in analytics and data management to more efficiently comply with laws and to investigate and monitor risks. There is also use of cryptography, blockchain, artificial intelligence, and smart contracts. Business schools have developed a range of courses seeking to address these novel developments.²²

These developments may be incorporated into existing courses dealing with banking, financial services and regulation. However, there is also an opportunity to create a dedicated elective that examines technology in the finance industry through a legal lens and/or the use of technology in relation to compliance. Examples of such courses are University of Pennsylvania's "FinTech Challenge"²³ and Duke Law School's "FinTech and the Law".²⁴ UNSW Law will offer LAWS8174 "Financial Law and Regulation in the Age of FinTech" to postgraduate and JD students in 2018.

Legal Practice, Ethics and Technology courses – these courses address innovation in the delivery of legal services and law practice, including law practice management, law practice technology, ediscovery and big data, outcome prediction, legal project management, virtual lawyering and courtroom technology. The courses also have a strong legal ethics component and examine how innovation and technology impact on what it means to be a profession and the regulation of lawyers.

Examples include Duke Law School's "Introduction to Technology in the Law Office",²⁵ University of Calgary's "Legal Practice: Innovation", Columbia University School of Law's "Lawyering in the Digital Age Clinic",²⁶ Suffolk Law School's Institute for Law Practice Technology and Innovation which offers courses such as "The Twenty First Century Legal Profession" and "Lawyering in an Age of Smart Machines".²⁷ In Australia ANU Law teaches "The Future of Legal Practice"²⁸ and Bond Law School teaches "Technology and Legal Practice"²⁹

Coding (aka Computer Programming) - While familiarity with technology is seen as essential to the education of the modern lawyer, it is not thought to be necessary to be able to actually program a computer or write code. As one commentator has explained, "Lawyers do not need to know how to code any more than aspiring doctors need to know how to build lasers or fabricate surgical

²² See Anna Irerra, 'U.S. business schools embrace 'fintech' as students clamor for courses' *Reuters*, 9 June 2017.

²³ <https://goat.law.upenn.edu/cf/coursefinder/course-details/?course=fintech-challenge&sec=LAW%20937001&term=2017A&page=2>

²⁴ <https://law.duke.edu/academics/course/581/>

²⁵ <https://law.duke.edu/academics/course/765/>

²⁶ <http://www.law.columbia.edu/clinics/lawyering-in-the-digital-age-clinic>

²⁷ <http://www.suffolk.edu/law/academics/concentrations/25488.php>

²⁸ <http://programsandcourses.anu.edu.au/course/LAWS8318>

²⁹ <https://bond.edu.au/subject/laws77-110-technology-and-legal-practice>

instruments.”³⁰ However, a student wanting to pursue a law related occupation may require much greater knowledge about technology. For example, the legal solutions architect may need computer programming (coding) to perform their role of employing technology to create the technological solution.³¹

The dual degree structure for the LLB provides a ready solution to this issue as law students may enroll in Bachelor of Computer Science/Bachelor of Laws. However, to truly prepare the student for a law related occupation there may need to be greater inter-disciplinary engagement between the two areas.

It may also be beneficial to provide for computer science courses to be taken as law electives. This is to cater for the student who develops an interest in technology later in their LLB degree but who are not enrolled in Computer Science and for students undertaking the JD who do not have a computer science or coding background.

The School of Computer Science offers a first year core course COMP1511 Introduction to Programming that may be suitable as a law elective. The course is mandatory for all CSE majors, but open to other students. It does not require any prior computing knowledge or experience.³²

Alternatively the Law School could devise its own computer programming course. Such a course would need lecturers with expertise in coding and its application to legal information. Examples include Georgetown Law School’s “Computer Programming for Lawyers: An Introduction”³³ and Harvard Law School’s “Programming for Lawyers”.³⁴ This may be achieved through co-teaching the course with another UNSW faculty or school.

The precise content of a coding / computer programming course requires further investigation.

The Need for Coordination

A number of potential electives are discussed above. Historically the law school has left the introduction of electives to individual academics who have the interest to bring the course forward. To ensure that multiple competing electives are not proposed it may be better for greater coordination to take place in the development of electives.

³⁰ Catrina Denvir, “The rise of the multi-disciplinary lawyer: a challenge for legal education”, *Legal Futures*, 26 May 2017.

³¹ See eg Richard Susskind, *Tomorrow’s Lawyers* (Oxford University Press, 2d ed 2017) 136-137.

³² See <http://www.handbook.unsw.edu.au/undergraduate/courses/2018/COMP1511.html>

³³ https://apps.law.georgetown.edu/curriculum/tab_courses.cfm?Status=Course&Detail=2723

³⁴ <http://hls.harvard.edu/academics/curriculum/catalog/default.aspx?o=71516>

3. Other skills (Recommendation 6)

Emotional intelligence (EQ) is a combination of skills, including psychology, collaboration, group dynamics and organizational behavior. The need for the skill is well put by Jordan Furlong, who in a report to the Canadian Bar Association stated:³⁵

Clients need our empathy, perspective and personal commitment in order to feel that we really understand and appreciate what they're going through. Our colleagues need our engagement, respect and understanding in order to try their hardest and help achieve the best outcomes for those we serve. As lawyer work moves farther away from papers, processes and transactions, the human element of who we are and what we do becomes all the more important.

The significance of emotional intelligence, teamwork and collaboration derives directly from the changes wrought by technology. It is the lawyer's human characteristics that differentiate them from a technological solution.³⁶ Understanding and responding to a client's concerns and goals is the value-add. Unbundling of legal services requires lawyers to collaborate not only with other lawyers but also with technologists, project managers, and other professionals.³⁷

Emotional intelligence should be developed through UNSW Law's existing commitment to teamwork and collaboration, which forms part of its approach to teaching and assessment. Consideration should be given to the development of further resources that academics can deploy in their courses.

Project management. Many large corporate transactions and disputes share many similarities with large projects in other industries which are subject to project management.³⁸ As a consequence it is not surprising that proven management techniques are being adapted to the provision of legal services to help lawyers achieve their goals, and the goals of their clients.³⁹

Legal project management (LPM) involves the scoping, scheduling and costing of legal work, accompanied by resourcing, managing and monitoring with a view to delivering that legal work in an efficient and effective manner.⁴⁰

Project management courses such as CVEN9702 "Project Planning & Control" and CVEN9731 "Project Management Framework" are offered in the Faculty of Engineering. As a result some of our dual degree LLB students may have access to these courses. However, other LLB students will not, and neither may our JD students.

³⁵ Jordan Furlong, *Do Law Differently – Futures for Young Lawyers* (Canadian Bar Association, 2016) 18. See also Richard Susskind, *Tomorrow's Lawyers* (Oxford University Press, 2d ed 2017) 75.

³⁶ Michael Legg, "Embrace robotic disruption but don't lose your human skills", *The Australian*, 16 June 2017, 26.

³⁷ Mark Cohen, "The Future Lawyer", *Forbes*, 30 May 2017.

³⁸ Richard Susskind, *Tomorrow's Lawyers* (Oxford University Press, 2d ed 2017) 35.

³⁹ James Mullan, "Legal project management: passing fad or here to stay?" (2012) 12(3) *Legal Information Management* 214; Petra Stirling and Peter Dombkins, "Legal Project Management", UNSW CLE, Sydney, 23 February 2017.

⁴⁰ See eg Therese Linton, *Legal Project Management* (LexisNexis, 2015) 4.

Steps are already underway to introduce the formal teaching of project management through UNSW Law clinics and internships as students undertake projects, albeit on a smaller scale, as part of those courses.

Consideration should also be given to including legal project management in the Legal Practice, Ethics and Technology course discussed above or creating a stand-alone Legal Project Management elective course. It may be best developed as a LLM/JD course but with LLB students eligible to apply to enroll. For an example see Suffolk Law School's "Process Improvement and Legal Project Management" course⁴¹ and Vanderbilt Law School's "Legal Project Management".⁴² UNSW has considerable expertise in the area of project management that could be drawn on in creating a law-focused course. Equally, leading law firms have also expressed a willingness to teach a Legal Project Management course.

Legal analytics. Lawyers may deal with quantitative information in numerous settings:⁴³

- Working with (or against) experts on damages calculations, product-failure investigations, establishing causation for toxic torts, forensic evidence in criminal cases.
- Working with accountants, bankers and advisors on commercial transactions such as mergers, acquisitions, tax planning or development of financial products.
- Algorithms for sentencing.
- Dealing with electronically stored information, technology assisted review, and other eDiscovery issues.
- Conducting data-driven transaction and case assessments.
- Making decisions and advocating with statistical arguments.

The dual degree structure for the LLB is typically seen as the answer to knowledge about finance and statistics as law students may enroll in Bachelor of Commerce/Bachelor of Laws, Bachelor of Economics/Bachelor of Laws and Bachelor of Science (Advanced Mathematics)/Bachelor of Laws. However, this does not cater for the student who develops an interest in finance and statistics as applied to legal practice later in their LLB degree but who are not enrolled in one of the above dual degree options or for students undertaking the JD who do not have a finance or statistics background.

The aim is not to emulate the in depth study associated with a degree in finance or statistics but, rather to provide an ability to understand and work with this area of knowledge. This knowledge may be able to be conveyed through existing courses that deal with the settings discussed above. Equally an elective course that provided an introduction to finance and statistics (and possibly accounting) for lawyers may be a way in which to respond to this skills gap. For example Duke Law School offers "Analytical

⁴¹ <http://www.suffolk.edu/law/academics/degrees/jd/23600.php?CourseID=620>

⁴² <https://law.vanderbilt.edu/courses/324>

⁴³ The Council of the Inns of Court (COIC) and the Royal Statistical Society (RSS), *Statistics and probability for advocates: Understanding the use of statistical evidence in courts and tribunals* (2017); Daniel W. Linna Jr, Why Law Students Should Take Quantitative Analysis: Big Data, Algorithms, Courtrooms, Code, and Robot Lawyers, 22 October 2016 <http://www.legaltechlever.com/2016/10/law-students-take-quantitative-analysis-big-data-algorithms-courtrooms-code-robot-lawyers/>

Methods”,⁴⁴ Harvard Law offers “Analytical Methods for Lawyers”⁴⁵ and Chicago-Kent College of Law offers “Legal Analytics 1” and “Legal Analytics 2”.⁴⁶

4. Extra-curricular activities (Recommendation 7)

Hackathons - A hackathon is a short but intense collaboration between people with a variety of skills, usually including computer programmers or developers and subject matter experts, which aim to solve a particular problem. Law-based hackathons will address legal problems and require experts in the relevant area of law and/or legal practice. The hackathon usually begins with presentations on the problem to be solved and ends with teams presenting their solutions.

Examples:

JusticeHack (Sydney, 18-20 July 2016) held at UNSW Law School. Law and computer science students sought to address access to justice issues for the Refugee Advice and Case Work Service (RACS).

Breaking Law (Melbourne, 5-7 August 2016) – held at Melbourne Law School. Students who had studied finance, law, marketing, programming or web design sought to solve corporate legal challenges.

Disrupting Law (Brisbane, 5-7 August 2016) held at Queensland University of Technology. Students with law, technical, business and design backgrounds sought to find new ways to do traditional legal tasks.

JusticeHack was a student initiative which the law school supported. UNSW Law has the distinction of being the first Australian law school to hold a hackathon, but it needs to ensure that an annual hackathon is institutionalized at UNSW. Consideration needs to be given to how this may occur. A first step may be to engage with the UNSW student law society as to whether it should become one of its activities.

5. Continuous Improvement (Recommendation 8)

The speed with which technology is improving, and changes to the provision of legal services occurring, requires that the skills for lawyers (and law related occupations) be under continual evaluation, and correspondingly, the teaching of those skills be continually updated and improved.⁴⁷

For legal education this means keeping up to date with developments in technology and considering their ramifications for law, legal practice and society more generally. This is done with a view to incorporating those considerations into course materials, or in some circumstances, devising new courses. The improvement process is the responsibility of individual lecturers but also the larger organisation. Most law teachers undertake a version of this by the very nature of staying up to date with what the law is and what is happening in their area of research. However, the adaption suggested

⁴⁴ <https://law.duke.edu/academics/course/319/>

⁴⁵ <http://hls.harvard.edu/academics/curriculum/catalog/index.html?o=64299>

⁴⁶ <https://legalanalytics.squarespace.com/>

⁴⁷ Jon Garon, “Legal Education in Disruption: The Headwinds and Tailwinds of Technology” (2013) 45 *Connecticut Law Review* 1165 at 1212 (nature of changes to legal practice are difficult to predict); George Williams, Testimony to FLIP Inquiry, 22 August 2016 (“students are being trained for a profession that does not exist yet”).

here is to consider changes in technology and related practices as they effect substantive areas of legal knowledge or course content.

6. Educating the Educators (Recommendation 9)

The above discussion highlights that there is a rapidly changing environment for law students and lawyers. This environment impacts on the courses that UNSW Law needs to teach and the skill set that its academic staff requires. There needs to be opportunities for academic staff to learn about technological developments that impact their areas of teaching.

Annexure 1 – Membership of the MCR

Michael Legg, Chair

Sonia Nitchell (or delegate) from Student Services

Ben Golder as Associate Dean Education

Andrew Lynch as Head of School

Thomas Molloy, Educational Designer

Kate Bond as Director of Undergraduate Studies

Mehera San Roque as Director of JD Studies

Marina Nehme as Director of Learning and Teaching

Rebecca Crosby