

ANNEX A

Singapore Management University Second Major in *Accounting Data and Analytics*for Accountancy students

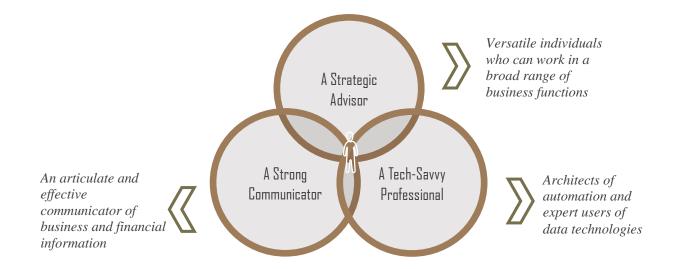
for Accountancy students

Preparing Future-Ready Accounting Professionals

The practice of accounting and the competencies required of professional accountants are being reshaped by trends in digital technologies and their impact on business. **The SMU Second Major in** *Accounting Data and Analytics* **will be a first in Singapore** to prepare accountants who will be expert users of emerging technologies and adopters of smart software and analytics.

Unlike the "data analytics" courses offered by an information system curriculum, the SMU Second Major in *Accounting Data and Analytics* **goes deep into the relevance and application of data technology in the accounting domain.** This knowledge of how and where to apply technological know-how will enable SMU accounting graduates to perform higher-level tasks that are increasingly expected of accountants.

Traits of the SMU Bachelor of Accountancy graduate:





The Curriculum Design

The SMU Second Major in *Accounting Data and Analytics* is designed in consultation with industry stakeholders, which included the Big Four and major banks. We have designed the structure of the second major based on the skill-sets employers now look for, as illustrated below:

Programming knowledge and language (Python & R)

Ability to write a programme to automate data aggregation, forecasting models, data analysis etc.

Accounting application courses
Courses that teach the application of
technology in accounting work for
students to select based on their
interest and intended career pathway

<u>Data Management</u>, including data quality management, security (data loss & risk), and governance

Data Visualisation

Ability to present technical information to an audience with no or little technical knowledge

Robotic Process Automation and other emerging technologies

Ability to understand and design own automation

The Second Major Courses

Students studying the Second Major in *Accounting Data & Analytics* will take five compulsory modules in data technology to equip themselves with the basic analytics skill-sets. They will then apply these skill-sets in the accounting context by taking two accounting application electives. Lastly, students will complete a compulsory capstone module under the SMU-X innovative teaching pedagogy whereby they experience real-life application by working closely with an industry partner to design and develop an intelligent accounting function solution to a practical problem.

Data Technology COMPULSORY: 5 Modules	Accounting Application ELECTIVES: Any 2 Modules
 Accounting Information Systems Data Management Data Modelling and Visualisation Statistical Programming Introduction to Programming 	 Forecasting and Forensic Analytics Analytics for Value Investing Analytics for Financial Instruments Audit Analytics Information Systems Governance and Assurance
COMPULSORY: Accounting Analytics Capstone (SMU-X)	



* Students who have interest to take other SMU second majors can study the courses under this new Second Major in *Accounting Data and Analytics* as their accounting elective courses.

For the brief course synopsis, visit https://accountancy.smu.edu.sg/bachelor-accountancy/accounting-data-and-analytics

Quotes from Students and prospective students on Need for Data Analytics 2nd Major

Existing Students

"With the rapid advancements in technology, students will invariably encounter more demanding requirements in the accounting industry. The new major in Accounting Data and Analytics will provide an incredibly exciting platform for SMU undergraduates. Equipped with this increasingly relevant skill-set, we will be able to adapt more easily within a fast-changing environment." – Kenneth Tan, Accountancy Student 2016, SMU Scholar's Programme, Incoming President of SMUXtremists

"In my opinion, technology empowers accountants. The increasing automation of various processes enables us to focus on our creative tasks such as data analysis and evaluation. In addition, we require analytics tools to capitalise on the recent proliferation of 'big data' and generate deeper insights. I believe that a proficient understanding of accounting analytics and technology will benefit us greatly as accountants of tomorrow. I am confident that SMU Accountancy's new major in Accounting Data and Analytics will provide us with the breadth and depth necessary to excel in any accounting analytics role. In particular, I am looking forward to participate in the Accounting Analytics Capstone, where I will have the valuable opportunity to gain practical experience via a collaboration with an external stakeholder on a real-world project."

– Perry Kwan, Accountancy Student 2016, SMU Scholar's Programme, President, Citi-SMU Financial Literacy Club

Prospective Students

"A paradigm shift in today's business world towards the wide use of data technology in handling accounting data can be readily observed. While accountants today are still required to carry out the menial and arduous tasks of double entry bookkeeping and balancing of accounts, accountants of the future are required to move towards the use of technology albeit the digitization of accounting systems are still in its infancy years. Possessing an analytical mind for accountants is now a prerequisite and no longer a differentiating factor among the world's leading business players. It is the ability to implement computing programs and technology to elevate the accountant's predictions and solutions, that is crucial in the current business environment. The introduction of this new major by SMU School of Accountancy would certainly provide students with the necessary opportunities and knowledge to be able to achieve similar technological breakthroughs in the various accounting and finance sectors, giving SMU students an edge over their competitors."

- Javier Toh Jia Jie, Prospective BAcc student

"From what I gathered reading the curriculum, this second major sounds great! The skills that this major hones is relevant and useful, especially in a world which is becoming increasingly technologically advanced. With the rise of new technology such as blockchain, students should go beyond dated teachings and be prepared to anticipate change and progress toward more relevant skill sets. This major interests me and I hope to be able to learn more about it once my term in SMU starts!

- Damien Choo, Incoming BAcc Student