

Date submitted to SSCPR: September 29, 2021

Date Self-Study Report approved by SSCPR: November 25, 2020

Date of External Review: March 1 & 2, 2021

#### **SUMMARY**

Summarize what the program has determined - through evidence - about program quality (e.g. strengths, challenges, opportunities for improvement, potential threats, etc.)

**Background:** The Computer Science and Information Technology (CSIT) department offers three academic programs: a Certificate in Computer Information Systems (1 year, 30 credits), a Diploma in Computer Information Systems (2 years, 60 credits) and a Bachelor's Degree in Information Technology (4 years, 120 credits). The CSIT department has enjoyed significant enrollment growth over the last 4 years, particularly with international students. This growth has been challenging to respond to and we have had to add faculty quickly and focus on execution rather than strategic planning. Our two-year Diploma program has seen the most growth and continues to significantly outpace the certificate and degree programs and is worthy of continued focus and investment.

We have sought and received feedback on our program from our Program Advisory Committee (PAC), students, alumni, faculty, and discipline/sector experts. We have received some very positive feedback on the program structure, content, and delivery. Our PAC membership has been refreshed and we have many industry experts that want to see us evolve, improve our competitiveness, and become a top educator for the IT industry. At the same time, we see our graduates completing degrees but wanting more than what they received. Even existing students and faculty recognize that there is room for improvement and with their feedback, they are challenging us as a department to listen and respond.

**Strengths:** (What do we excel at and what separates us from the competition?)

- The CSIT programs are in high demand with a > 90% fill rate for classes [SSR]
- Program has a strong emphasis on teamwork and group projects [SSR]
- Class sizes are small allowing faculty to be more accessible [SSR]
- Course content is relevant to current industry needs and designed to focus on the fundamentals and provide hands-on practical experience [SSR, ERR]
- Course contents are aligned to industry-recognized certification where possible (e.g., Cisco, CompTIA A+) [SSR]
- Majority of program courses can be transferred to other BC post-secondary institutions [SSR]
- Co-op option provides students with relevant industry work experience which strengthens their resumes when looking for employment post-graduation [SSR]
- Dedicated CSIT student labs provide hands-on experience with real computing devices [SSR]
- There has been a recent expansion and reinvigoration of the Program Advisory Committee (PAC) with relevant IT industry experts [SSR, EER]



**Weaknesses:** (What is stopping the organization from performing at its optimum level? What do we need to improve to remain competitive?)

- Students need to strengthen their capabilities to collaborate with people/groups in the same and different professions/departments [SSR, EER]
- Students need to balance a strong technical foundation with good business skills and emotional intelligence [SSR, EER]
- Students need to improve both their written and oral communication skills [SSR, EER]
- Students need to strengthen independent learning and develop resourcefulness [SSR, EER]
- Faculty need be more collaborative, both within the department and in other disciplines/departments [SSR, EER]
- Course content needs to be regularly reviewed, updated, and refreshed [SSR, EER]
- New course content needs to be developed to include emerging topics (e.g., multidisciplinary analytics, cloud computing, AI/machine learning) [SSR, EER]
- Accessibility to courses needs to be improved for students (more sections, more class times) to allow for timely graduation [SSR, ERR]
- Additional options need to be introduced (e.g., analytics, Al/machine learning, cloud computing) for both the Diploma and Degree programs [SSR, ERR]
- Improve accessibility to computer labs with physical equipment (servers, desktops, switches), lab technicians and hands-on activities [SSR, ERR]
- Students require more accessibility to faculty and staff to provide guidance and support [SSR, ERR]
- Improve accessibility to equipment for computer intensive courses, such as high-performance laptops which can be borrowed from library [SSR, EER]
- Provide a mechanism/forum for students to provide feedback and ensure that follow-up is provided [SSR, EER]

#### **Opportunities:** (What are the favorable external factors that could give an organization a competitive advantage?)

- Offer courses on relevant industry topics (e.g., Al/machine learning, data analytics) for working professionals delivered through KPU's Continuing and Professional Studies (CPS) program [SSR]
- Enhance the uniqueness and quality of instruction at KPU using project-based learning as a fundamental pedagogy form [SSR, ERR]
- Integrate CSIT course offerings with other courses within the School of Business (SoB) and other KPU Faculties and creating new credential offerings such as data analytics [SSR]
- Integrate and assure greater general business skill competencies within the CSIT offerings

#### **Threats:** (What are unfavorable external factors that could harm the organization?)

- Other post-secondary institutions are offering contemporary and progressive IT options attracting both domestic and international students [SSR]
- The current program is buttressed by substantial international student demand for technical, computer-science related credentials. Federal government immigration policies may impact international student access to Canadian post-secondary programs and thus subject the program to significant risk [SSR]
- Industry technology, standards and trends experience fast paced changes and advancements that create challenges in aligning course content and industry expected learning outcomes.
- Challenges in funding availability for contemporary capital equipment/software to align with industry



#### **QUALITY ASSURANCE GOALS**

List the program's Quality Assurance Goals (broad statements about what the program intends to accomplish to ensure program quality). Identify the Recommendation(s) – drawn from the **Self-Study Report and External Review Report** - each Goal addresses. Provide a brief Rationale for each Goal (see the Quality Assurance Plan Guidelines for instructions). Add or remove rows as necessary.

**GOAL 1:** Renewal of the CSIT Two-year Diploma Program

**RATIONALE FOR THIS GOAL:** Evidence from the CSIT self-study report clearly indicates the two-year Diploma is very popular and growing. The Diploma program has shown over 500% growth over the last 5 years, as compared to no growth in the Certificate program and modest growth in the BTech in IT program (approximately 50%). This observation suggests that the Diploma program is worthy of significant investment and renewal, and we have identified two core elements for consideration.

Recommendation(s) this Goal Addresses	Report (page number)
Add options to the diploma program – Unlike other post-secondary institutions, the current CSIT diploma program lacks any options (e.g., data analytics, full-stack web development, game development). Additionally, the student/industry survey recommendations and feedback from the PAC recognizes this limitation in the program and supports are supports and supports and supports and supports are supports and supports and supports and supports are supports and	SSR – 15, 19, 23, 44, 68-69, 75-77 ERR – 2, 6
students and alumni need to strengthen their soft skills, particularly in the areas of oral and written communication, reading, comprehension, student	SSR – 18-19, 23, 32, 44, 69, 75, 77 ERR – 3, 6
resourcefulness, interview preparedness and group collaboration. Recommendations from the most recent PAC meeting reinforced this need, suggesting that strong foundational business/technical skills need to be balanced with emotional intelligence, self-learning, interdisciplinary collaboration, and communication.	



**GOAL 2:** Strengthen the CSIT Four-year BTech in IT Program

**RATIONALE FOR THIS GOAL:** Evidence from the CSIT self-study report clearly indicates the four-year BTech in IT program is on the right track but requires some attention and "polish". As mentioned previously, the BTech in IT program has enjoyed modest growth over the last 5 years (approximately 50% growth). Additionally, the BTech in IT program has two relevant options in the areas of (1) Computer Network Administration and Security and (2) Mobile and Web Application Development. However, there have not been any significant changes in the degree program in recent years and feedback received from the PAC and survey respondents suggests the program requires some attention in four core areas.

Recommendation(s) this Goal Addresses	Report (page number)
Strengthen options through PAC Advisement – As mentioned previously, CSIT's PAC has significantly updated its membership, with strong participation and	SSR – 15, 19, 23, 44, 70, 75-77
representation in several relevant disciplines/sectors. In recent meetings, the PAC has provided valuable suggestions for refreshing our existing four-year program and associated options.	ERR – 2, 6
Embed Business Management Skills - Being part of the School of Business provides the CSIT a unique opportunity to collaborate cross functionally and identify	SSR – 18-19, 23, 32, 44, 69, 75, 77
ways to strengthen and enhance our technical program. More specifically, we can strengthen our graduate's skill sets and marketability by identifying complementary business management skills that can be introduced as part of our existing BTech in IT program. This addition will provide the needed technical	ERR – 3, 6
skills as well as the business skills to compete in today's challenging job market.	
Strengthen BTech in IT Core Technical Skills - The student and alumni surveys identified dissatisfaction in three program core competency areas. These areas are	SSR – 32, 44, 71
network management, software development, and database management. Although we provide instruction in these areas, we can improve and strengthen them in the BTech in IT degree program.	ERR – 3, 6
Enhance Experiential Learning - One of the objectives of the CSIT BTech in IT program is to provide experiential learning opportunities for our students so they	SSR – 46-48, 57, 62-65, 71, 75, 77
can be productive very quickly when entering the workforce, requiring minimal on-the-job training. We provide this capability through lab and assignment work and through our co-op program. However, several opportunities regarding experiential learning are identified in the self-study and external review reports that will allow us to strengthen the BTech in IT degree program.	ERR – 3, 5, 6



GOAL 3: Collaboration focus through Project-based Learning

RATIONALE FOR THIS GOAL: The CSIT department recognizes that IT programs require more than the traditional teacher-led lecture-style instruction. We aspire to incorporate student-centered learning approaches through hands-on labs, individual and group-based projects, and experiential learning through solving real-world challenges and problems. Feedback from students and alumni indicates we fall short of our aspirations in four key areas. Specifically, top areas of dissatisfaction are found in 1) the quality of instruction, b) the ability to accommodate diverse learning styles, c) lack of practical hands-on experiential learning opportunities, and d) faculty/student connection. With this goal, the CSIT department would formally adopt project-based learning pedagogy as a unifying platform within its program streams. Embracing a project-based learning approach will require thoughtful changes and require significant collaboration among KPU faculty, students, and staff.

Recommendation(s) this Goal Addresses	Report (page number)
Improve quality and consistency of instruction - A focused and purposeful adoption of a common pedagogy within the department and among faculty will naturally drive improvements in the quality and consistency of instruction. Faculty will need to be trained in the concepts of project-based learning and those who teach the same classes will need to collaborate to ensure all classes are consistent with this common learning approach.	SSR – 47, 52, 57-59, 72, 75, 77 ERR – 4, 6
Accommodate diverse learning styles - Project-based learning is a student-centered approach that shifts the focus of instruction from teaching to learning facilitation. Students become responsible for engaging the learning process and employ learning approaches that work best for them, including the pace of learning and how they will assess their understanding of the material.	SSR – 47, 72, 75, 77 ERR – 4, 6
<b>Practical hands-on experiential Learning</b> - Project-based learning is designed to teach students through doing. Teachers provide the resources and support for the students to solve real-world problems, often through individual and group projects. By thoughtfully and purposefully ensuring our courses and curriculum are project-based, we will enhance and improve our student's practical hands-on learning experience.	SSR – 47, 57, 62, 64, 72, 75, 77 ERR – 2, 3, 6
Faculty/Student connection - Project-based learning facilitates faculty/student connection by recasting the instructor as a coach and guide, assisting students with problem solving, knowledge development, and soft skills development as they work collaboratively with their classmates.	SSR – 49, 57, 59, 72, 73, 75, 77 ERR – 4, 6



**GOAL 4:** Integration of the CSIT Programs with the Larger School of Business

**RATIONALE FOR THIS GOAL:** As a department in KPU's School of Business, CSIT has a unique opportunity to collaborate cross functionally and identify ways to strengthen and enhance the technical program by working with other programs in the School of Business. Additionally, there is an opportunity for the CSIT department to marry its technical expertise with other SOB programs and develop new courses and programs.

Recommendation(s) this Goal Addresses	Report (page number)
Collaborate cross-functionally within the School of Business to develop new courses and programs - There is interest within the SOB for the CSIT program to	SSR – 15, 19, 23, 44, 73, 75-77
collaborate with other programs to develop a suite of data analytic courses that could be part of a certificate credential in data analytics. This suite of data	FRR - 2 6
analytic courses could also be available in modified form through Continuing Professional Studies (CPS) and therefore be available to business professionals seeking	LIXIX — 2, 0
training in this emerging area.	



### RECOMMENDATIONS THE QUALITY ASSURANCE PLAN DOES NOT ADDRESS

List the Recommendations from the Self-Study and External Review this Plan does not address. Provide a brief rationale for why these Recommendations cannot be addressed. Add or remove rows as necessary.

Recommendations	Report (page number)	Rationale
N/A – all major recommendations addressed.		



### **QUALITY ASSURANCE FIVE-YEAR ACTION PLAN**

Describe the Quality Assurance Strategies (specific plans of action) the program must achieve to attain its Goal over the next five year. Detail the **steps** the program will take to achieve each Strategy. Add or remove Strategies and tables as necessary.

MONTH/YEAR WHEN THE FIVE-YEAR ACTION PLAN BEGINS: September, 2021



STRATEGY 1: Add Options to the Diploma Program

GOAL(S) THIS STRATEGY SUPPORTS: GOAL 1: Renewal of the CSIT Two-year Diploma Program

Step(s) Required to Achieve this Strategy	To be Led by	To Start on (M/YY)	To be Completed By (M/YY)	Notes
Consult with faculty, identify IT diploma options offered by other post-secondary institutions	Wei Li	Sept/21	Dec/21	Online-survey, Zoom meeting
Consult with PAC, identify prioritized list of diploma options recommendations	Mayyadah Al-Ani	Sept/21	Dec/21	Online-survey, Zoom meeting
Present findings at department meeting and identify/approve diploma option recommendation	Mayyadah	Jan/22	Jan/22	Record in meeting minutes
Draft preliminary diploma option proposal, including curriculum	Wei Li	Jan/22	May/22	Circulate drafts for review and revisions
Review draft proposal with PAC and CSIT department	Mayyadah	May/22	June/22	Annual PAC meeting, department meeting, record in meeting minutes
Create formal proposal	Xing Liu	June/22	Aug/22	Circulate drafts for review and revisions
Obtain institutional approvals from SoB, KPU for new diploma with option	Xing Liu	Aug/22	May/23	Approval can take 6-12 months, may have to adjust timelines for subsequent steps
Consult with CDC regarding internships/work placement arrangements	Wei Li	Sept/22	Dec/22	
Consult with SoB Dean's office regarding Sept/23 option launch	Xing Liu	Sept/22	Dec/22	
Launch new diploma option – approvals, marketing/ scheduling, etc.	Xing Liu	Jan/23	Sept/23	Approved through Senate by March 2023
Annual Review Sept/23 to Sept/26 - Follow-up, review, adjustments	Chair	Sept/23	Sept/26	Annual review

### **Resource Implications (if applicable)**

What are the resources required to achieve this Strategy? Faculty PD/accountable time, upgraded HW/SW for option, PAC advisement When are these resources required? Sept/21

What Faculty and/or Institutional support is required? Institutional approval of new diplomas with options, CDC advisement regarding provision of internships and work placement arrangements, financial resources for expanded computer lab capacity and support (HW/SW). Sub-committee: Mayyadah Al-Ani, Wei Li, Xing Liu



STRATEGY 2: Strengthen BTech IT Program

GOAL(S) THIS STRATEGY SUPPORTS: GOAL 2: Strengthen and refresh the CSIT Four-year BTech in IT Program

Step(s) Required to Achieve this Strategy	To be Led by	To Start on (M/YY)	To be Completed By (M/YY)	Notes
Consult with faculty, identify recommended changes to existing BTech options (e.g., curricular adjustments, strengthening core technical skills)	Wei Li	Sept/21	Dec/21	Online-survey, Zoom meeting
Consult with PAC, identify recommended changes to existing BTech options	Mayyadah Al-Ani	Sept/21	Dec/21	Online-survey, Zoom meeting
Present findings at Department meeting and identify/approve strengthening actions	Mayyadah	Jan/22	Jan/22	Record in meeting minutes
Draft preliminary BTech Degree proposal	Wei Li	Jan/22	May/22	Circulate drafts for review and revisions
Review draft proposal with PAC and CSIT department	Mayyadah	May/22	June/22	Annual PAC meeting, department meeting, record in meeting minutes
Create formal proposal	Xing Liu	June/22	Aug/22	Circulate drafts for review and revisions
Obtain institutional approvals from SoB, KPU for any curricular/program adjustments, budget approval	Xing Liu	Aug/22	May/23	Approval can take 6-12 months, may have to adjust timelines for subsequent steps
Consult with CDC regarding internships/work placement arrangements	Wei Li	Aug/22	Sept/22	
Launch – 12-month implementation starting with "quick hits"  *quick hits = easily attainable changes that have big impact without major curricular adjustments not needing approvals	Xing Liu	Sept/22	Sept/23	"Quick hits" may be achieved without institutional approval and can begin before approval of other changes. For example, faculty could include coverage for current and relevant topics in existing courses (e.g., 1-2 hours coverage on Machine Learning, Business Intelligence, Cybercurrency, Artificial Intelligence, Blockchain, etc).
Annual Review Sept/23 to Sept/26 - Follow-up, review, adjustments	Chair	Sept/23	Sept/26	Annual review

### Resource Implications (if applicable)

What are the resources required to achieve this Strategy? Faculty PD/accountable time for consultation and curricular development/adjustment, upgraded HW/SW for options, PAC advisement

When are these resources required? Sept/21



What Faculty and/or Institutional support is required? Institutional approval of curricular/program adjustments, CDC advisement regarding provision of internships and work placement arrangements, financial resources for expanded computer lab capacity and support (HW/SW). Sub-committee: Mayyadah Al-Ani, Wei Li, Xing Liu



STRATEGY 3: Adjust all credential offerings to assure greater program graduate business skill competencies

GOAL(S) THIS STRATEGY SUPPORTS: GOAL 1: Renewal of the CSIT Two-year Diploma Program, GOAL 2: Strengthen the CSIT Four-year BTech in IT Program

Step(s) Required to Achieve this Strategy	To be Led by	To Start on (M/YY)	To be Completed By (M/YY)	Notes
Consult with SoB faculty program leaders and CDC staff, identify critical business education soft skills required (e.g., oral/written communication, reading, comprehension, student resourcefulness, group collaboration, self-learning, collaboration, etc.)	Warren Edwards	Sept/21	Dec/21	Online-survey, Zoom meeting, shared committees
Consult with PAC, identify critical business education soft skills required	Bojiang Ma	Sept/21	Dec/21	Online-survey, Zoom meeting
Review effectiveness of current roster of arts, business, and INFO courses within diploma and BTech programs at contributing to soft skills development, review timing/assessment/reinforcement of soft skills through the duration of the programs	Bojiang Ma	Jan/22	May/22	Online-survey, series of working sessions
Draft preliminary proposal for curricular development/adjustment	Warren	Jan/22	May/22	Circulate drafts for review and revisions
Review draft proposal with PAC and CSIT department	Bojiang Ma	May/22	June/22	Annual PAC meeting, department meeting, record in meeting minutes
Create formal proposal	Warren	June/22	Aug/22	Circulate drafts for review and revisions
Obtain institutional approvals from SoB, KPU for any curricular/program adjustments, budget approval	Bojiang Ma	Aug/22	May/23	Approval can take 3-12 months, may have to adjust timelines for subsequent steps
Launch – 12-month implementation starting with "quick hits"	Warren	Sept/22	Sept/23	"Quick hits" may be achieved without institutional approval and can begin before approval of other changes
Annual Review Sept/23 to Sept/26 - Follow-up, review, adjustments	Chair	Sept/23	Sept/26	Annual review

### **Resource Implications (if applicable)**

What are the resources required to achieve this Strategy? Faculty PD/accountable time for consultation and curricular development/adjustment, PAC advisement

When are these resources required? Sept/21

What Faculty and/or Institutional support is required? Advisement from SoB faculty program leaders, CDC staff, institutional approval of curricular/program adjustments. Sub-committee: Bojiang Ma, Warren Edwards



STRATEGY 4: Strengthen BTech in IT Core Technical Skills

GOAL(S) THIS STRATEGY SUPPORTS: GOAL 2: Strengthen the CSIT Four-year BTech in IT Program

Step(s) Required to Achieve this Strategy	To be Led by	To Start on (M/YY)	To be Completed By (M/YY)	Notes
Identify courses to focus on based on program review self-assessment report – review faculty, alumni, student, and PAC surveys	Cesar Lopez Castellanos	Sept/21	Oct/21	
Consult with faculty, critically review all selected course – identify gaps and improvement opportunities	Нао Ма	Sept/21	Dec/21	Online-survey, Zoom meeting
Consult with PAC, identify gaps and improvement opportunities	Mandeep Pannu	Sept/21	Dec/21	Online-survey, Zoom meeting
Present findings at Department meeting for feedback/approval	Cesar, Hao, Mandeep	Jan/22	Jan/22	Record in meeting minutes
Draft preliminary proposal for curricular development/adjustment	Cesar	Feb/22	May/22	Circulate drafts for review and revisions
Review draft proposal with PAC and CSIT department	Cesar	May/22	June/22	Annual PAC meeting, department meeting, record in meeting minutes
Create formal proposal	Cesar, Hao, Mandeep	Jul/22	Oct/22	Circulate drafts for review and revisions
Obtain institutional approvals from SoB, KPU for any curricular/program adjustments, budget approval	Mandeep	Oct/22	Dec/22	Approval can take 3-12 months, may have to adjust timelines for subsequent steps
Launch – 12-month implementation starting with "quick hits"	Cesar, Hao, Mandeep	Sept/22	Sept/23	"Quick hits" may be achieved without institutional approval and can begin before approval of other changes
Annual Review Sept/23 to Sept/26 - Follow-up, review, adjustments	Chair	Sept/23	Sept/26	Annual review

#### Resource Implications (if applicable)

What are the resources required to achieve this Strategy? Faculty PD/accountable time for consultation and curricular development/adjustment, PAC advisement

When are these resources required? Sept/21

What Faculty and/or Institutional support is required? Institutional approval of curricular/program adjustments, financial resources for expanded computer lab capacity and support (HW/SW). Sub-committee: Cesar Lopez Castellanos, Hao Ma, Mandeep Pannu



STRATEGY 5: Adopt Project-based learning to enhance quality of instruction

GOAL(S) THIS STRATEGY SUPPORTS: GOAL 2: Strengthen the CSIT Four-year BTech in IT Program, GOAL 3: Collaboration focus through Project-based Learning

Step(s) Required to Achieve this Strategy	To be Led by	To Start on (M/YY)	To be Completed By (M/YY)	Notes
Consult with Teaching and Learning Commons (TLC) define project-based learning as it applies to CSIT, define and develop plan to adopt project-based learning across all programs, identify/define/prepare two workshops that will be delivered to faculty over the next 12 months	Ted Chiou	Sept/21	Feb/22	
Consult with CDC regarding internships/work placement arrangements beyond Co-op to enhance experiential learning	Edward Lo	Sept/21	Dec/21	
Workshop #1: Explore and implement project-based learning for all programs, develop teaching teams, summarize findings, and capture actions	Edward Lo	Feb/22	Feb/22	During KPU Reading week
Draft preliminary proposal for adopting project-based learning as a fundamental pedagogy	Edward Lo	Jan/22	May/22	Circulate drafts for review and revisions
Workshop #2: Explore and implement project-based learning for all programs, develop teaching teams, summarize findings, and capture actions	Ted Chiou	May/22	May/22	During spring semester break – 3-6 months later?
Consult with PAC and CSIT department, gather feedback on project-based learning pedagogy	Jendy Wu	May/22	June/22	Annual PAC meeting, department meeting, record in meeting minutes
Create formal proposal	Ted Chiou	June/22	Aug/22	Circulate drafts for review and revisions
Obtain institutional approvals from SoB, KPU for any curricular/program adjustments, budget approval	Jendy Wu	Aug/22	May/23	Approval can take 3-12 months, may have to adjust timelines for subsequent steps – can existing course learning outcomes be achieved using the new pedagogy, minimizing the need for course outline changes?
Launch – 12-month adoption starting with "quick hits"	Edward Lo	Sept/22	Sept/23	"Quick hits" may be achieved without institutional approval and can begin before approval of other changes. For example, we will work with Teaching and Learning Commons to develop a Professional Development workshop to develop our approach to Project Based Learning. As a result of this workshop, faculty will naturally



				employ some of the techniques into their
				courses.
Annual Review Sept/23 to Sept/26 - Follow-up, review, adjustments	Chair	Sept/23	Sept/26	Annual review

#### **Resource Implications (if applicable)**

What are the resources required to achieve this Strategy? Faculty PD/accountable time for consultation and curricular development/adjustment, PAC advisement

When are these resources required? Sept/21

What Faculty and/or Institutional support is required? Advisement/tailored workshops provided by Teaching and Learning Commons specialists, CDC advisement for provision of internships/work placements, financial resources for expanded computer lab capacity and support (HW/SW). Subcommittee: Edward Lo, Ted Chiou, Jendy Wu



STRATEGY 6: Develop suite of data analytic courses

GOAL(S) THIS STRATEGY SUPPORTS: GOAL 4: Integration of the CSIT Programs with the Larger School of Business

Step(s) Required to Achieve this Strategy	To be Led by	To Start on (M/YY)	To be Completed By (M/YY)	Notes
Consult with SoB faculty program leaders as well as programs in other Faculties, identify collaboration opportunities to develop new certificate in data analytics	Warren Edwards	Sept/21	Dec/21	Online-survey, Zoom meeting, shared committees
Consult with PAC, identify data analytics certificate option for SoB & KPU students	Warren Edwards	Sept/21	Dec/21	Online-survey, Zoom meeting
Present findings at Department meeting for feedback/approval	Jendy Wu	Jan/22	Jan/22	Record in meeting minutes
Draft preliminary proposal for curricular development/adjustment	Warren Edwards	Jan/22	May/22	Circulate drafts for review and revisions
Review draft proposal with PAC and CSIT department	Jendy Wu	May/22	June/22	Annual PAC meeting, department meeting, record in meeting minutes
Create formal proposal	Warren Edwards	Jul/22	Aug/22	Circulate drafts for review and revisions
Obtain institutional approvals from SoB, KPU for new data analytics certificate	Jendy Wu	Aug/22	May/23	Approval for new certificate can take 12 months, may have to adjust timelines for subsequent steps
Launch new certificate – 12-month implementation including approvals, marketing/ scheduling, quickhits, etc.	Warren Edwards	Sept/22	Sept/23	
Annual Review Sept/23 to Sept/26 - Follow-up, review, adjustments	Chair	Sept/23	Sept/26	Annual review

### **Resource Implications (if applicable)**

What are the resources required to achieve this Strategy? Faculty PD/accountable time for consultation and curricular development/adjustment, PAC advisement

When are these resources required? Sept/21

What Faculty and/or Institutional support is required? Advisement from SoB faculty program leaders, CDC staff, institutional approval of curricular/program adjustments, financial resources for expanded computer lab capacity and support (HW/SW). Sub-committee: Warren Edwards, Jendy Wu



PLAN SUPPORTED BY:	Diane Purvey, Provost & VP, Academic Pro Tem	November 1, 2021
Provost's Name	Provost's Signature	Date
Stephanie Lewes	Stephanie Howes	October 29, 2021
Dean's Name	Dean's Signature	Date