



Report on the Establishment of Academic Programming Offered Through Distance Education

Brown University
October 25, 2021



In November 2020, the New England Commission of Higher Education granted Brown University approval to offer academic programs via distance education through Spring of 2023, with the understanding that any plans to offer new online programs should be approved prior to implementation and that a full assessment of the University's activities in this area was to be addressed in the upcoming Interim Report. We write now to seek general approval for distance education, due to the fact that students with projected completion dates beyond 2023 are enrolling in five existing programs that include significant online content; we want to ensure that they are able to complete their degrees successfully. We are also planning for an expansion of digital education, described in more detail below. This report provides an overview of the existing degrees as well as a summary of current planning efforts, and describes the measures that Brown is putting in place to ensure that courses and programs meet rigorous standards for academic quality, provide an excellent learning experience for students, and reach new communities of learners. While the experience since March 2020, when we pivoted quickly and effectively to distance education as a matter of necessity, certainly accelerated plans for increasing distance learning options, Brown has in fact been offering such programs successfully for the last decade.

Since 2011, Brown University has been offering academic programs that leverage distance education to educate diverse learners across the world. These programs are offered across a spectrum of digital modalities: fully online courses, offered through a variety of platforms including EdX, Zoom, and the Canvas learning management system; hybrid courses and programs, which include a subset of learners who are in residence and a subset who attend class remotely; blended programs, for which the curriculum requires both in-person attendance and online participation at different points in the program; and low-residency programs which require 5 weeks of study per year on campus and which are otherwise delivered online. We use the term digital education to collectively describe all of these modalities.

Brown's digital education activities are consistent with the vision set forth in our strategic plan, *Building on Distinction*, which seeks to promote educational leadership by exploring innovation at the intersection of technology and education through "aggressive experimentation in new modes of education, testing new ideas, assessing their efficacy, and adapting them as necessary." We believe that this work will have a transformative impact by enabling us to improve how we teach and learn and to expand our reach well beyond the College Hill campus.

To this end, we have in recent years made significant investments that have put us in a strong position to enhance digital education offerings further. Chief among these is the recent restructuring of the Sheridan Center for Teaching and Learning to include a centralized Digital Learning and Design (DLD) team at Brown. Through this work, we have ensured that we not only have the technical talent to support high quality program development but that this work is also rooted in Brown's tradition of pedagogical excellence. The strategic redesign of the School of Professional Studies (SPS) to focus on master's and professional education has strengthened our capacity to support enrollment management, marketing and recruiting, and student engagement. The Office of Information Technology (OIT) has been and will continue to be an active and engaged partner to ensure that we have the technical capacity and secure environment to offer digital education programs across a range of platforms and learners.

Against this backdrop, and based on our success during academic year 2020–2021 transitioning our curriculum to a fully online/hybrid model, Brown is expanding its digital education offerings. These efforts are guided by the work of the Academic Innovation Unit, established in spring 2020 and charged with developing a strategy that effectively leverages technical and other resources to support this work. The Academic Innovation Unit is responsible for developing university-level strategy, resources, and infrastructure for digital education.

Descriptive Information

- **Person with institutional responsibility for the academic quality of distance education programming:** Richard Locke, Provost
- **Person to be contacted with questions about the content of the report:**
Elizabeth Doherty, Deputy Provost for Academic Affairs
elizabeth_doherty@brown.edu, 401-863-7845

The URL(s), including passwords where necessary, where information about the institution's distance education activities is available and where online services can be accessed by both students (prospective and current) and faculty; include brief descriptors of each as appropriate.

1. **Support for digital teaching and learning (<https://dld.brown.edu/>):** The Sheridan Center's Digital Learning and Design and Online Program Development teams support online and remote education and include instructional designers, instructional technologists, and media professionals who collaborate with faculty develop engaging online, residential, and blended courses; design and produce integrated media solutions and assets; provide flexible digital solutions and classroom spaces; and generally create collaborative learning communities of individuals from across campus and now around the world. Included in the link above are course development guides, technical help for digital education, and information about group and individual training for instructors. All members of Brown's teaching communities are able to take advantage of the Sheridan Center's programs and services. See <https://www.brown.edu/sheridan> for further information.
2. **Current digital education programs offered at Brown:** The below URLs link to blended (i.e., partially residential and partially online) programs that have launched over the last decade:
 - Executive MBA: <https://emba.brown.edu>
 - Cybersecurity: <https://cs.brown.edu/degrees/cybersecurity>
 - Healthcare Leadership: <https://professional.brown.edu/healthcare>
 - Innovation Management and Entrepreneurship (PRIME): <https://prime.brown.edu>
 - Technology Leadership: <https://professional.brown.edu/technology>

In addition, a number of individual courses at both the undergraduate and graduate level are being offered this year in fully-online and remote-accessible formats. Information about individual courses that are offered in hybrid or fully-online modalities can be accessed by at <http://canvas.brown.edu>

3. **Centralized hub for online education at Brown:** We are currently developing a centralized website to contain all relevant information about online education at Brown. This website will serve as a central hub that connects users to support services, and a list of digital education programs so prospective students in particular can quickly identify course and degree offerings by modality. We expect to launch this website in spring 2022.

Additional online services specifically related to technical infrastructure and support for both students (prospective and current) and faculty are outlined in the section below. Brown's Office of Information Technology (OIT) maintains the following website with a comprehensive list of all available services: <https://it.brown.edu/services>.

A description of the technical infrastructure designed to support the institution's distance education activities (include bandwidth, details of connectivity, network maintenance and support, course management software including the version of the software, help desk services, and staffing, security, backups, etc.).

Brown has adequate bandwidth, connectivity, network maintenance, and support for all of the educational activities included in this report. These resources are generally burstable. All campus-based software is kept within two major releases, and all cloud-based resources are up to date. The University has also invested in adequate staffing for systems support to keep access available, reliable, and secure: the Office of Information Technology consists of 200 IT professionals across the disciplines of systems management, cybersecurity, network and telecommunications management, research computing support, digital innovation, web technologies, and general services management.

The campus network is Cisco-based and managed by a team of 22 network and telecommunications professionals. The Brown network connects to our Internet Service Provider (OSHEAN) with two redundant ten gigabit connections for connectivity to commodity Internet and Internet2 services. The Brown network also connects to OSHEAN with a dedicated 10 gigabit connection for movement of research data. OSHEAN is upgrading its network backbone to 100 Gigabit. OSHEAN has a 100 Gig connection to New York and a 30 gigabit connection to Boston for Internet2 services. OSHEAN also has two Internet Service Providers connected to their backbone for commodity Internet services. OSHEAN also peers with DE-CIX in New York City. DE-CIX is a cloud broker service that connects to all major cloud providers for hosted services. The networks managed by the University's SAAS ("software as a service") providers are managed by the providers themselves.

Helpdesk services are staffed by 40 IT professionals, and also by a knowledge base for self-service troubleshooting of most issues a student may experience. Live help desk call-in or chat services are available 8:30am to 5pm EST. Help requests can be made 24-hours a day, 7-days per week via my.brown.edu or via email.

For cloud-based SAAS solutions (Salesforce, Marketing Cloud, ModernCampus), bandwidth is sufficient for the needs of our users and provided within contractual terms that may be amended as necessary:

- Salesforce (Summer 12 Patch 18.6) is a robust Customer Relationship Management (CRM) platform with ample network bandwidth and security protocols, redundant architecture (four online copies of core CRM data). We also leverage the Kaseya Spanning backup tool (V 1.10) to back up our Salesforce metadata on a nightly basis. We currently have a Premier support package with Salesforce as well, which includes 24X7 developer support and advisory services. Salesforce also uses trust.salesforce.com to communicate performance and security issues with users. Site Reliability Engineering monitors for operational incidents, and a Computer Security Incident Response team monitors globally for potential security threats for rapid response.
- TargetX (V 2010.2) sits natively within the Salesforce platform. TargetX has a case management system and support staff that monitor issues and respond to priority production issues.
- Informatica Cloud (V August 2021) is used in part of the TargetX managed package, so we reach out to our TargetX account executive or submit a case within the TargetX environment.
- The FormAssembly (V 2.2) environment is hosted in heavily audited data centers operated by Amazon Web services. FormAssembly uses Qualys to run vulnerability scans. We have a dedicated service manager for any issues that may arise.

Brown's generally available engagement platforms include:

- Canvas (current cloud release)
- Salesforce (summer 21 Patch 18.6)
- Salesforce Social Studio & Command Center (Marketing Cloud products) (current cloud release)

- Salesforce Service Cloud for concierge level case management for individual participants needs (current cloud release)
- Mogli for one to one texting and text administration within the Salesforce platforms. (current cloud release)
- All Analytics platforms
- Large library of pre-built system to system APIs and integrations
- My.Brown.edu (LifeRay) for one stop systems access for all constituents. (V 6.1)
- Robust suite of Coursetools Supported by OIT & DLD
- Banner (V 8/9)

Efforts are currently underway to make the following improvements to our technical infrastructure, which will be in place by fall 2022. OIT is hiring additional staff outside of the Eastern time zone to address virtual help desk requests that occur outside of Brown's regular working hours, and the office is implementing BOT technology to offload commonly asked questions via chat so that human intervention is not required when a participant needs general assistance. OIT is also increasing automation, expanding functionality, and improving the user experience for [Coursetools.brown.edu](https://coursetools.brown.edu), a portal where instructors post syllabi and request tools and services for their course, such as a Canvas course site, a course blog, a Google course group, and more. Students access cab.brown.edu to learn about courses, plan schedules, and access course registration. Finally, OIT is expanding the use of my.brown.edu, a personalized go-to digital destination for all Brown-related resources and services for students, faculty, and staff. It is available on any endpoint device (desktop or mobile) and displays a customized menu of services depending on the user. This information is behind the firewall and requires identity authentication.

A description of the institution's verification procedures (the procedures through which the institution will ensure that the student who registers in a distance education program is the same student who participates in and completes the program and receives the grade).

All Brown students, faculty and staff have two accounts: a Brown account used to access most Brown services, including Banner (student information system), Canvas (learning management system), and Workday (enterprise financial and human resources system); and a Google account for email and other Google tools. Most Brown services use the Shibboleth sign-on system.

Activating electronic services requires confirming adherence to the University's acceptable use policy, which prohibits sharing of account information (usernames and/or passwords), attempting to discover another user's credentials, and/or attempting to gain unauthorized access to another account. Students are expected to provide complete and true identity information during any identification verification process.

Brown requires the use of multi-factor authentication by faculty, staff, and students. The use of a second authentication factor serves as an impediment to acting on behalf of a Brown user. Additionally, significant amounts of data (IP addresses, device signatures, locations) are collected that could be used to identify potential instances of account sharing.

To augment the University's identity verification procedures, we are adding more frequent identity-proofing activities, including validation of government-issued identification via a video conferencing solution. Brown is also implementing a data-analysis practice to evaluate authentication events in order to identify potential violations of academic integrity via credential sharing. These additional measures are scheduled to be in place by fall 2022.

A list of any consortial partners or contractual relationships that support the institution's distance education activities with a brief explanation of each relationship.

IE University jointly confers the Executive MBA and delivers a portion of the academic program. Please see additional information in the section on the Academic Program and the MOU in Appendix A.

STANDARDS

1. *Describe how the proposed programming is based in the institution's mission.*

Mission and Purpose

Brown University is committed to providing an outstanding education to students at the baccalaureate, master's, and doctoral levels, to advancing scholarship, to fostering new discoveries, to making meaningful contributions, and to addressing challenges to benefit society. We set high intellectual and scholarly standards in order to support excellence in teaching and research and to attract faculty and students who participate in a global society with integrity and responsibility.

In 1998, the faculty and the Brown Corporation approved an expanded statement of its mission, one that updated the language of the charter while preserving its basic principles:

The mission of Brown University is to serve the community, the nation, and the world by discovering, communicating, and preserving knowledge and understanding in the spirit of free inquiry, and by educating and preparing students to "discharge the offices of life with usefulness and reputation." We do this through a partnership of students and teachers in a unified community known as a university-college.

Digital education programs are emerging as an important component of Brown's ability to fully realize its mission of serving the community, the nation, and the world; they are also critical to our ability to be truly inclusive in bringing together diverse learners from a range of personal and professional backgrounds, and from all corners of the globe. The University's commitment to equity and access is articulated in [Pathways to Diversity and Inclusion: An Action Plan for Brown](#), and is central to our strategic plan, [Building on Distinction](#).

Low-residency and fully online programs serve students around the world and permit them to access educational programs that might not otherwise be available to them and to put their training and/or research to work in the service of larger endeavors. Excellent hybrid and online degree programs increase curricular options for graduate students who work full-time and who seek the education, training, and knowledge to help them advance professionally. They eliminate geopolitical barriers and enable international students to participate in academic life at Brown. Finally, digital education offers the potential to address tuition costs by exploring whether specific programs – particularly those that are designed to serve the public good – can be priced at levels that make a Brown education more accessible to diverse learners around the world.

Currently, Brown offers 5 low-residency or fully-online professional master's degrees, which have demonstrated success in teaching, learning, and degree completion.

- **Executive MBA:** a low-residency 15-month business degree offered jointly with the IE Business School in Madrid, Spain (11th cohort, 292 graduates).
- **Sc.M. in Cybersecurity** (5th cohort, 103 graduates), in the Department of Computer Science: 18-month program designed for early and mid-career professionals to gain comprehensive understanding of cybersecurity technology and policy at the local, state, national and global levels (5th cohort currently enrolled, 79 graduates). This has transitioned from low-residency to fully-online in recent months.
- **Sc.M. in Healthcare Leadership**, in the School of Public Health: a low-residency 16-month program designed for senior leaders in the healthcare field (8th cohort, 162 graduates).

- **Sc.M. in Innovation Management and Entrepreneurship (PRIME)**, in the School of Engineering: a blended-format 15-month program designed for early career professionals looking to understand innovation at the intersection of business and engineering. (14th cohort, 177 graduates).
- **Sc.M. in Technology Leadership**, a low-residency program in the School of Engineering: 16-month degree designed for science and technology professionals (5th cohort, 85 graduates).

An additional program is currently undergoing review, with approval anticipated this semester:

- **fully-online Master of Public Health (MPH)**, in the School of Public Health: A 2-3 year degree program designed for part- or full-time working public health practitioners around the world.

Finally, at the undergraduate level, we are steadily increasing the number of online and hybrid courses that are offered each year to promote greater innovation and flexibility. Of the approximately 1100 courses offered in fall 2021, 66 are being taught fully online and another 41 are offered in hybrid format; the great majority of both types are undergraduate-level courses. Additionally, Brown is actively engaged in increasing undergraduate participation in experiential education opportunities (study away, research positions, internships, service engagements) that often take students away from campus. To support these aspirations, the College is removing historical bottlenecks that have prevented interested students from participating in these opportunities, one of which is inability to engage remotely or in a hybrid arrangement. For example, funded by the Office of the Provost, The Sheridan Center is partnering with relevant departments to redesign the STEM curriculum by developing strategies to move labs online.

In addition, online offerings continue to be popular options for students taking courses during the winter and summer semesters.¹ The Division of Pre-College and Summer and Winter Undergraduate Studies is gradually increasing the number of online courses that are offered during these terms to enable students to enroll in coursework while away from campus. Currently, 40 of 52 courses are remote accessible, and we expect to increase this to 60 in the next five years, which would support more than 1000 enrollments.

We seek general approval to continue to offer excellent low-residency programs, an expanded suite of fully online programs that includes those listed above, and individual courses that serve students' needs. This is consistent with the University's mission, and indeed extends it to reach new audiences.

2. *Describe the institution's planning for the proposed programming, including how the need or market for the proposed program(s) was determined. Describe how the institution's governing board, administration, and faculty were involved in the planning. As appropriate, describe the involvement of external groups, such as advisory groups. Provide information about how the institution will evaluate the proposed program(s).*

Review and Approval Processes. At Brown, responsibility for all new academic programs, regardless of mode of delivery, begins and ends with the faculty. During the initial planning stages, department or program faculty refine the concept, define the program's goals, develop the curriculum and learning objectives, and prepare a proposal that is reviewed through robust and well-developed internal processes. Proposals for new undergraduate concentrations (majors) are reviewed by the College Curriculum Committee and those for new graduate degrees are reviewed by the Graduate Council, both of which are composed of senior academic administrators, elected faculty, and student representatives. Approved proposals advance to the Academic Priorities Committee, which is chaired by the Provost and charged (*inter alia*) with making recommendations about the direction of the University's academic programs and

¹ Beginning in 2016, Brown's summer and pre-college programs pioneered a small selection of fully asynchronous online offerings; a handful of online offerings were developed in the College and expanded gradually, especially after the introduction of Wintersession in academic year 2016–17.

the strategic allocation of academic resources. Following approval by the APC, a proposal is forwarded to the Faculty Executive Committee (the primary locus of faculty governance), and to the full Faculty for a vote. At every stage of the process, there is ample opportunity for consideration, discussion, and revision. Once established, programs are also evaluated by the appropriate bodies at regular intervals to ensure high quality and encourage continuous improvement. The final stage is for the Fellows of the Brown University Corporation to approve the program formally.²

The development of the proposed online MPH is an illustrative example of this process:

Design: A University-wide leadership group has overseen the design of the program, in close consultation with faculty within the School of Public Health. The immediate team is composed of key representatives from SPH: the Deputy Dean, Associate Dean of Education, Director of the (residential) MPH Program, and Executive Dean for Finance and Administration. Planning efforts have included careful attention to the student support services and administrative infrastructure that will be required for the program to be successful, working closely with the Dean of the School of Professional Studies, the Deputy Provost and Vice President for Academic Innovation, the Associate Director for Strategic Initiatives, the Associate Provost for Teaching and Learning, and the Senior Director for Digital Learning and Design. We have also engaged two external consultants, faculty members who serve as the leaders of online education at their respective institutions, to help guide the strategic design of this program. Separate operational teams overseeing budget, digital design, curriculum planning, and marketing and enrollment have been established and include membership from related units across campus.

Review: The program has been reviewed by the MPH leadership team, the MPH Curriculum Committee, SPH Faculty Committee, and SPH Executive Committee. Each of these has focused on ensuring that the program accords with the School of Public Health's mission and values, has a rigorous curriculum that meets the standards of public health accreditation, is financially sound, and has the necessary faculty and administrative staffing and support to ensure its long-term success. The proposal will now proceed through the University governance process outlined above. The Graduate Council and the APC have recently endorsed a set of guidelines for use in evaluating proposals for online or low-residency degrees, including:

- The extent to which the distance education version of the existing program aligns with the academic unit's strategic plan;
- The intended audience for the distance education program and anticipated enrollments;
- The impact of a distance education version of an existing program on diversity, inclusion, and educational access;
- The level of participation of faculty in the program or department in planning, implementing, and teaching the new format;
- The capacity of the department or program to continue to support existing curricular offerings and degree programs;
- Whether regular faculty will teach in the distance program and/or whether new faculty and staff resources will be necessary;
- The use of technology to support excellence in instruction and advising and to facilitate regular and substantive interaction between students and faculty;
- Mechanisms for assessing learning outcomes for students studying at a distance and strategies for ensuring that these are comparable to those achieved in the residential version of the program.

² The master's degrees described above and throughout this report were all approved through this process, and the proposal for an online MPH is currently being reviewed.

Determination of need. The decision to offer any educational program at Brown is underpinned by the University's confidence in its ability to provide high-quality programs that can deliver the educational and professional outcomes sought by students. For new digital education programs, we conduct extensive market research to confirm that there is a viable market of prospective students for the program, and to understand how the offering compares to similar programs at peer institutions. For example, we have worked with Hanover Research to conduct a detailed market analysis for an online MPH that included:

- *Student demand analysis*, which explored public health degree completions regionally and globally to understand student demand for this degree.
- *Labor market analysis*, which analyzed the types of jobs that graduates of MPH degrees pursue and whether there is a sufficient job market for graduates. Additionally, this analysis highlights the competencies, credentials, and skills that graduates are required to acquire in order to be professionally competitive for the job market.
- *Competitor analysis and program benchmarking*, which examined the regional and global purchase for an additional degree program in the context of peer programs. This analysis assesses the level of saturation in the market, and how the proposed program design compares with peers in terms of curricular elements and competencies, tuition/cost of attendance, and time to completion.

We subsequently contracted with an external vendor in to conduct a more in-depth demand estimation that will help us understand the specific attributes of prospective applicants (their educational and professional background, demographics, and current geography) as well as their sensitivity to various tuition levels. The vendor is conducting this analysis through focus group and survey research. Ultimately, these different steps enable us to ensure that there is significant market demand for the online MPH and to ensure that there is sufficient return on investment for the University to launch this program.

Evaluation. All undergraduate and graduate programs, regardless of their mode of delivery, are externally reviewed on a regular basis, and the CCC and Graduate Council conduct reviews between formal assessments. Additionally, all academic programs in the School of Public Health, Alpert School of Medicine, and the School of Engineering must conform to the requirements of their respective accreditors, which include explicit attention to student learning outcomes.

The University has a number of internal and external mechanisms for program assessment. For digital education programs, the primary modes of evaluation by students include course evaluations, climate surveys, and alumni surveys to measure whether students in the low-residency programs and courses consistently receive a high-quality education, have a positive educational experience and a sense of connection to Brown, and attain their professional goals. More broadly, we monitor application, admission, and yield data. Finally, we conduct periodic external reviews of programs, in partnership with the APC. If these evaluations reveal significant issues, SPS collaborates with the program director and faculty to assess them and develop a plan for remediation. The following are examples of revision to our existing digital education programs that were implemented as consequence of evaluation:

- **Cybersecurity Sc.M.** In spring 2021, the Graduate Council approved the modification of the former low-residency Executive Master of Cybersecurity program into a fully-online degree as a result of internal assessment and in the interest of quality improvement. The department of Computer Science, rather than SPS, now oversees the program in order to ensure excellence and faculty engagement.
- **Healthcare Leadership Sc.M.** In 2018, an external review of the program identified several weaknesses. To further strengthen and support this program, the curriculum was reviewed and streamlined; academic responsibility for the program was shifted from SPS to the School of Public Health so it would be guided more directly by a relevant academic unit; and, effective fall 2021, the program will conform to the University's standard academic calendar in order to enable students to access Brown resources more seamlessly. The degree type was changed to an Sc.M.

- **PRIME Sc.M.** The PRIME program was assessed through internal and external reviews in 2018 and 2019 and was substantially revised in order to address concerns about students' preparation at entrance as well as the rigor of the curriculum. It was changed from an Sc.MIME (a degree that was evidently unique to Brown) to an Sc.M. to align with norms in degree types; the program leadership changed; the curriculum was revised and refreshed; and the program shifted to a three-term structure with an online summer start followed by students in residence in the fall and spring, intended to better position them for recruiting and to allow more time for capstone projects. PRIME plans to offer simultaneous residential and low-residency options to enable more working students to enroll.

3. *Describe where responsibility for distance education falls within the institutional structure and how the quality and integrity of the online programming will be assured.*

Immediate responsibility for on-campus and distance-education programs lies with the department or school where the program is housed, with administrative and curricular support provided by the College for undergraduate programs, the School of Professional Studies (SPS) for master's programs, and the Graduate School for doctoral programs. The partnership model of oversight between SPS and academic departments for the low-residency master's degrees described in this report evolved as a result of a strategic review, which concluded that departmental faculty ought to play a more central role in the design, implementation, and oversight of professional programs. As noted above, the Sc.M. in Healthcare Leadership now resides in the School of Public Health, the Sc.M. in Cybersecurity is in the Department of Computer Science, with extensive involvement from Watson Institute for International and Public Affairs, and the Sc.M. in Technology Leadership and the PRIME program are in the School of Engineering. These changes were initiated in order to ensure close and continuing oversight by faculty with expertise in teaching and scholarship in the fields in which these degrees are offered. Since Brown does not have a business school, the Executive MBA continues to be run through the School of Professional Studies.

The Provost, in his role as chief academic officer, has ultimate responsibility for the quality of distance education. His designate, the Deputy Provost and Vice President for Academic Innovation, is charged with developing University-level strategy, resources, and infrastructure for online education. The VPAI works closely with the Deans of the College, Graduate School, and SPS to ensure the necessary infrastructure, financial planning, and academic quality are in place for low-residency and fully-online programs. To this end, the Vice President chairs the Digital Education Infrastructure Committee, which includes faculty, students, and key administrative leaders, e.g. the Chief Information and Digital Officer, Associate Provost for Teaching and Learning, and the deans of SPS and Pre-College and Summer and Winter Undergraduate Studies. The Digital Education Infrastructure Committee focuses on ensuring that the University has the necessary human resources, technological infrastructure, and policies and practices in place to ensure that online education programs are of the highest quality.

Brown is taking the following steps to strengthen our digital education infrastructure:

- *Enhancing marketing, admissions, and enrollment management support:* We are hiring a Director of Marketing Strategy in SPS; conducting a University-wide rollout of Salesforce and hiring 3 Salesforce experts, expanding our admissions support from 8am-5pm to 24-hour support; and updating registration policies to improve inefficiencies that prevented part time course enrollment.
- *Strengthening Digital Learning and Design:* The Sheridan Center is adding new instructional designers and media specialists to the DLD team; expanding professional development opportunities around digital learning for faculty, staff, and students; increasing programs centered on digital inclusivity (e.g. Universal Design for Learning); and launching new course design institutes to support educational innovation for academic instructors.
- *Expanding technology infrastructure and analytics:* We are expanding technical support through the launch of a 24/7 helpdesk; implementing a data analytics practice to evaluate authentication to

identify potential violations of academic integrity; and creating a single point of entry for learning communities to access digital course tools (coursetools.brown.edu), as described in a previous section of this report.

An advisory committee, composed of the President, Provost, and selected members of the University Corporation, provides counsel and high-level oversight of strategic plans for digital education at Brown, including new program development and financial planning and support, among other areas.

4. Describe the proposed online program(s): student learning goals, structure, curriculum, award of credit (including compliance with credit hour regulations), and content. Discuss the involvement of faculty in the development of the proposed program(s). Indicate how technology will be used to support regular and substantive interaction between students and faculty. Provide evidence of the institution's capacity to offer the new programming and to maintain its current programs at an acceptable level of quality. Indicate how the institution will ensure that students studying at a distance are able to achieve learning outcomes comparable to those achieved in on-ground programs.

As described above, Brown currently offers five low-residency and fully online programs. In addition, we expect to launch a new online Master of Public Health in September 2022. As described in Section 2, faculty play a central role in the design and delivery of all programs, not only in developing the curriculum and learning goals, staffing plans, and assessment and evaluation of the programs, but also by participating in the formal governance processes described earlier. Of course, Brown faculty also teach in all of these programs.

Each of the existing and proposed degree programs described in this report requires a minimum of 32 credits, and every course offered in these programs meets the standard for Brown course credit. Consistent with Federal and Commission policies, work for a Brown course credit ("seat time," required activities, and out-of-class work), regardless of modality, is expected to total at least 180 hours for the semester. Many courses exceed this minimum requirement. Starting in Fall 2016, faculty have been required to include information on their syllabi about required course activities along with the expected average hours of homework, reading, and other out-of-class work per week, and a statement of learning goals for the class that contextualizes the nature and extent of required meetings and out-of-class work.

Current Digital Education Programs at Brown. The structure and curriculum for each of the existing and proposed digital education programs at Brown is summarized below. The programs are delivered through a combination of synchronous lectures and discussion sections through Zoom, and asynchronous online modules through the Canvas learning management system.³ The residential and synchronous sessions are designed to foster deep engagement and collaboration between students (many include group work, for example) and with faculty. The asynchronous sessions include paced assessments to ensure students stay on track of material, as well as access to community boards on Canvas to support interactions with peers and teaching assistants. Remote students have access to and are encouraged to participate in advising sessions and office hours through Zoom. Some programs have taken additional steps to ensure that remote students are able to fully engage with faculty despite not being able to attend in person. The EMBA, for example, divides each class into sections of no more than 25 students per faculty member to allow deep interaction with peers and faculty during class time.

Each program has its own clearly-defined learning objectives, described on their websites and reinforced throughout the curricula. More generally, they are focused on the following: using cross-disciplinary methodologies and lenses to gain an understanding of the field; the development of a comprehensive perspective extending beyond local concerns; attention to developing knowledge and skills to create

³ With the exception of the EMBA, which uses IE's proprietary lecture delivery software and the Blackboard LMS.

flexible, responsible and sustainable organizations or endeavors; experiential learning and/or a significant capstone project to demonstrate students' learning and develop their vision for making an impact in the field. Details about the curriculum for each degree, and program-specific learning objectives, can be accessed through the program links. We describe their structure and content briefly here.

- **Executive Master of Business Administration** (<https://emba.brown.edu>) is offered jointly with the triple-accredited IE Business School in Spain. Anchored in the values and strengths of both institutions, the IE Brown Executive MBA integrates innovative management skills with the human sciences and practical business studies. It is designed to develop well-rounded managers and entrepreneurs. Students must complete 20 courses (51 credits total, including courses delivered by Brown and IE) over 15 months in order to receive their degree. The program is delivered in a blended format of online courses and in-person instruction.⁴
- **Cybersecurity Sc.M.** (<https://www.brown.edu/graduateprograms/cybersecurity>) is an 18-month online program that builds on Brown's strengths in cybersecurity innovation. Rooted in interdisciplinary inquiry, the program offers two tracks, in Computer Science and in Policy, with the latter offered in collaboration with the Watson Institute for International and Public Affairs. Both aim to provide students with rigorous technical skills and a comprehensive understanding of cybersecurity technology and policy at the local, national, and global levels. The curriculum includes 3 required courses, 3 core courses, and 2 electives. Students complete the program in an average of 2 years.
- **Healthcare Leadership Sc.M.** (<https://professional.brown.edu/healthcare>) is a 16-month program designed for physician leaders and healthcare professionals with an average of 15+ years of professional experience. The curriculum provides a sophisticated, cross-industry understanding of the policy, regulations and global forces disrupting the healthcare sector and the skills needed to meet the new and evolving demands for leadership. To this end, the program draws from Brown's strengths in public health, policy, health economics, and evidence-based medicine. The curriculum consists of 9 credits (6 full credit and 6 half credit courses) and a capstone, and includes asynchronous online modules and 5 weeklong residencies on campus, providing opportunity for faculty engagement, peer-to-peer collaboration and community building.
- **PRIME Sc.M.** (<https://prime.brown.edu>) is a STEM degree based in the School Engineering and designed for early career professionals with up to 5 years of work experience. The program challenges students to examine innovation through technology and positions graduates for careers in consulting, investment banking, health/medicine, traditional engineering and technology companies, and as founders of new ventures. The curriculum includes 8 courses (6 PRIME core courses and 2 director-approved electives), which may be completed over 3 terms (summer, fall, and spring). PRIME students may participate in an internship with a PRIME-partnering company during their studies. Students in PRIME have the choice of two formats of attendance: a full-time residential program, or a blended program. The blended offering is structured for working professionals and mixes online with in-person sessions.
- **Technology Leadership Sc.M.** (<https://professional.brown.edu/technology>) was launched in 2016 and was designed to introduce mid-career professionals with a balance of technical expertise and foundational skills rooted in social science and humanities. The curriculum was designed around four key areas: global value creation, leadership communication, strategic thinking, and innovation. The curriculum spans 16 months, and includes 4 courses in leadership, 5 courses in strategic thinking and data analysis, and 3 applied learning experiences including a critical challenge capstone project, an

⁴ It is worth noting that IE Business School has over 15 years of experience in online education. It has developed proprietary [online video capabilities \(WOW\)](#) that allow faculty and students to have state of the art connectivity and interactions. As evidence of their successful online delivery and methodology, their online MBA is ranked #1 by QS and #2 by the *Financial Times*, and ranked 3rd among EMBA programs in the world by *The Economist*.

international experience, and professional development opportunities. The program blends residential and online learning.

- **Online Master of Public Health (pending approval)** is based on Brown's significant experience offering the graduate programs described above in various digital education modalities and builds on the foundation of our residential MPH, which has graduated over 505 students since its launch in 2000. The online MPH is designed for public health leaders and will train them to use methodological data tools including biostatistics and survey methods to critically assess a population's health and develop. The program will combine academic coursework, leadership training, development of communication skills, and the completion of a practicum to provide integrative education.

The program will offer a generalist track that requires a minimum of 11 courses (5 core courses; 6 combination of generalist concentration and electives) that align with core competencies that both maintain and strengthen the tenets of the current residential MPH program. These include research methodological skills (quantitative and qualitative); data analysis that influences policy implementation; communication and leadership. The online program will also include a 130-hour required practicum that students will work with staff to secure during the second year of the program. The School of Public Health has recently completed the Council on Education for Public Health (CEPH) re-accreditation process which has streamlined a pathway toward developing an online 2-year MPH program. All proposed courses, competencies, and practicum will be assessed by SPH curriculum faculty committees and by CEPH.

5. *Describe the student body the institution intends to serve with the proposed programming and how students will be recruited and considered for admission. Include information about the institution's goals for retention and graduation rates for students enrolled in online program(s). Describe the technical support available to online students and discuss how the institution will provide these students with access to needed support and other student services.*

Recruitment. The primary audience for distance education will be graduate students, many of whom are working part or full time, at the master's and executive master's levels. These students are seeking to expand their current skillset to advance in their current organizations or industries, or to cultivate an entirely new credential that enables them to pivot to different industries. Currently, both groups are recruited by the enrollment management and marketing teams in the School of Professional Studies, with close involvement from the academic programs, and this will continue for fully online programs. For the proposed online MPH, we are partnering with a leading marketing and enrollment company to manage our recruitment efforts. This vendor will manage digital marketing for the online MPH. To complement this work, in spring 2022 SPS is hiring a Director for Marketing Strategy to work closely with the marketing vendor and to design and adjust, as needed, the marketing plan for this degree program.

Retention and Student Success. Retention and completion rates are very strong. Brown is invested in helping students transition to graduate education and through degree completion. This responsibility is shared by faculty and professional advisors, and by various student support services, including the newly-created role of Associate Dean of Student Affairs in SPS, a position dedicated solely to master's students. The Associate Dean has responsibility for orientation and programming throughout the year to support student success for all master's students, including those who are low-residency and fully online. She is also the primary contact for students requiring referral to other sources of support such as Counseling and Psychological Services and Student Accessibility Services.

As low-residency and fully-online programs have expanded, we have learned best practices for working with these student populations and continue to refine our efforts to offer targeted professional development, programming for affinity groups, and community-building opportunities. For example, the Cybersecurity program views their students as located “in” the department and has subsequently designed their first-semester core courses to bring together all of the students, who separate into track-specific coursework in the second semester of the program. Within the core courses, students are organized into small groups that meet regularly with an advisor in order to build community and connections. Students in all graduate programs, regardless of modality, are represented by the Graduate Student Council, and students in the low-residency programs are consistently among the winners of annual awards from the Graduate Council for excellence in citizenship, scholarship, and engagement.

Student engagement and student success are also ensured through support from academic and administrative staff in the individual programs. In the MHL, MTL, and EMBA, program directors in SPS work directly with students and ensure that they are meeting milestones for satisfactory progress. In PRIME, the enrollment manager stays in contact with students and monitors their progress while not in residence. In the online MPH, the faculty director and administrative director will work directly with students to ensure successful progress and completion. In addition, we expect to hire student engagement advisors to offer supplemental support as the program achieves scale within the next 3-5 years.

The table below provides metrics of program health and their ability to support students to completion, calculated as an average over the last 10 years or overall if the program is less than 10 years old.

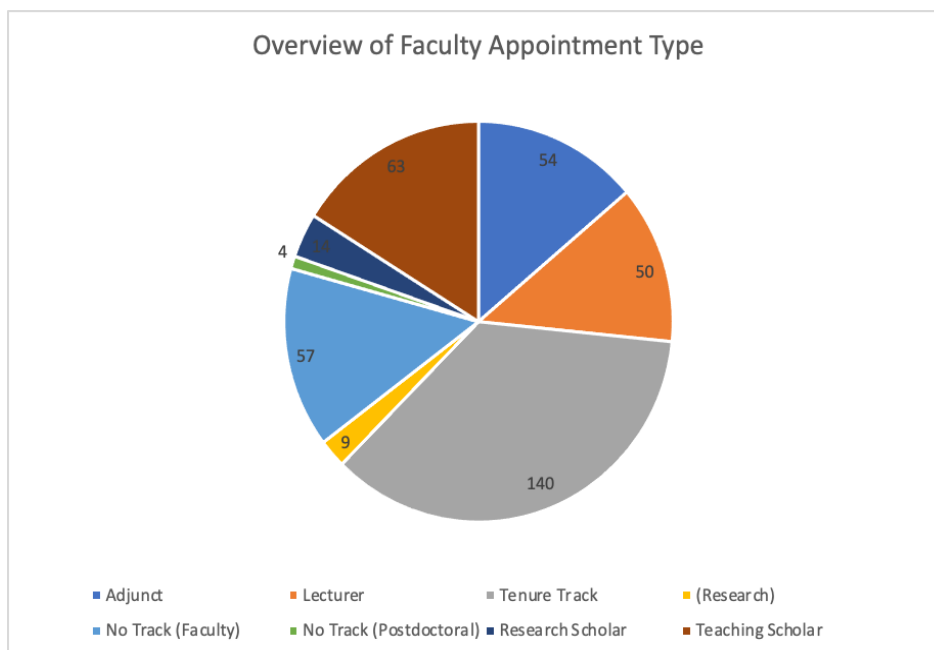
	Average Number of Applications	Average Yield	Average Cohort Size	Average Attrition Per Year	Average Number of Students on Leave of Absence Per Year
MBA	288	52.2%	40	<1	0
Cybersecurity	48	56.9%	28	1	2
Healthcare Leadership	47	68.3%	27	1	2
Technology Leadership	47	70.8%	33	<1	1
PRIME	148	40.4%	27	<1	<1

Access to Brown Resources. Online and low-residency students have access to the same student services, including technical support, that residential students have, with the exception of recreational facilities and the student health center building (they do, however, have the opportunity to purchase student health insurance). Brown now offers an opportunity for non-residential students to access non-psychological medical care through the HealthiestYou service, which is free to enrolled students regardless of their insurance and is easily accessible by downloading an app and engaging via a portal or by phone. In terms of resources related to student services, in 2020-21 all remaining paper-based student services processes that concern enrollment and registration were shifted online and are now handled, and tracked, completely electronically.

6. *Provide information about the faculty who will teach in the proposed program(s), including information about their qualifications and the institution's plans to provide needed training in online teaching methods. Discuss how students studying at a distance will receive academic advising.*

Teaching excellence is one of the central pillars of Brown's educational experience, whether in residential, blended, hybrid, or online courses and programs. The current faculty/student ratio is 6:1, and 95% of our full-time instructional faculty have terminal degrees. University-wide, the majority of teaching and advising is done by tenure-track or long-term core faculty. In the low-residency and fully-online programs, there are also non-tenure-stream faculty on long-term contracts. These teaching faculty will also be expected to advise students, which is critically important for long-term student success.

SPS is currently undertaking an analysis of the types of faculty who teach in master's programs vs. doctoral and undergraduate programs. The chart below indicates the different appointment types of faculty in the master's programs, with 140 of 392 being tenure-track faculty.



Training for teaching in digital education programs. The Sheridan Center for Teaching and Learning offers comprehensive support for all faculty who are teaching in both online and residential settings. The Center works with over half of Brown faculty each year. An assessment of support for digital teaching and learning at Brown – conducted serendipitously in 2019 and critical to our ability to respond quickly and effectively to the COVID-19 crisis – resulted in the creation of the Digital Learning & Design (DLD) group under the auspices of the Sheridan Center. As noted above, the DLD team includes instructional designers, instructional technologists, and media professionals who partner with faculty to develop engaging online, residential, and blended courses; design and produce integrated media solutions and assets; collaborate with faculty to explore new possibilities; provide flexible digital solutions and classroom spaces; and create collaborative learning communities of individuals from across campus and (now) around the world. DLD offers consultations and services, including an online (asynchronous) Designing and Teaching for Online module. The Sheridan Center offers certificate programs, course design institutes, instructor orientations, and workshops. Our experience with online teaching and

learning since March 2020 has brought into sharp focus the invaluable contributions of the Sheridan Center and the DLD group, which continue to refine mechanisms for supporting effective instruction.

In addition, there is extensive support for online and remote instruction in many other formats, including an extensive collection of guides for instructors including course development, virtual community building and other topics relevant to remote and online teaching. The DLD's work is augmented by online articles and technical help offered through Computing and Information Services, such as Using Zoom for Remote Teaching in addition to support through individual appointments to review Zoom settings. The DLD's instructional designers consult with individual faculty members on course design and help to coordinate media support, including help using Zoom or Canvas Media Library (Panopto), pre-recording content, or getting audio/video equipment. Finally, Media Services orients instructors to classroom technology and is able to provide "Zoom Buddies" to assist them while teaching.

As digital education programs attain greater scale, and new digital education programs are launched, the University will continue to expand staffing and other resources to support growing demands for instructional design and media support.

7. *Provide evidence of the institution's financial capacity to offer the proposed programming. Include multi-year enrollment projections and revenue and expense budgets, including indirect costs, for the proposed programming. Discuss how the institution's governing board has considered the financial aspects of the proposed programming. Describe how the institution will assure that students studying at a distance have access to, and use appropriately, the library and information resources they need to complete their program. Describe how the institution will support students in using information resources. Discuss the institution's plans to assure the sufficiency of its information technology to support its online programming, including any anticipated growth in such programs.*

To support Brown's current digital education footprint, as well as our plans for growth, the University is taking steps to ensure that we have the infrastructure and resources, financial and otherwise, to ensure that digital education at Brown is of the highest quality. Below and in Appendices C and D we outline the financial commitments that the University leadership has made to support this work. We also describe the measures that have been taken to bolster Library support for students who are studying remotely. Finally, we describe the significant investments in technology and media that Brown is making to ensure that faculty, students and staff are able to successfully engage in digital education now and into the future.

Financial health and viability. The PRIME, Cybersecurity, EMBA, MHL, and MTL degrees are projected to be self-sustaining and generate revenues that can be used to support department, school, and university priorities. PRIME, EMBA, and MTL are already in this position, while Cybersecurity is in its first year and is projected to have a small positive margin. Tuition for the EMBA is collected by IE Business School, with a portion transferred to Brown to cover expenses. MHL is in a period of rebuilding after several leadership transitions, and a decline in enrollment associated with COVID's dramatic impacts in the healthcare sector. Budgetary projections for all programs are provided in Appendix C.

As for the proposed online MPH, the University has been engaged in extensive financial planning and has committed significant resources to ensure that it has the staffing and infrastructure that are required to mount the program successfully. Please see discussion throughout this report, and Appendix D.

University Library. The Brown University Library is supporting remote teaching and learning through investments in digitization infrastructure, including the purchase of upgraded scanning equipment to ensure that all course reserves are available digitally, contracting with a vendor for Digital Rights Management on in-copyright material used in course reserves, acquiring upgraded scanning equipment, software, and file storage capacity to increase access to special collections material for faculty and

students (as well as a worldwide network of researchers), and working with the Office of the General Counsel to establish "Controlled Digital Lending," allowing the Library to scan full books and circulate them to faculty and students who are unable to be on campus provided only a single copy of the book (either physical or digital) is in circulation at any time. The Library is also implementing a system to provide support for managing and accessing electronic materials and has re-purposed collection resources to acquire new materials in electronic formats.

Graduate students enrolled in low-residency and online programs have always had access to the same high-quality services as on-campus students, including enhanced digital access to electronic and scanned materials for courses and scholarship, scanned special collections materials from Brown's John Hay Library, interlibrary loan (including digital provision of articles), online research consultations, and a rich synchronous and asynchronous online instruction program. Subject librarians developed online training especially for low-residency students, and librarians are available for consultations via video, phone, and chat. The Library's website offers 24/7 access to Brown's ejournals, ebooks, and over 500 research databases. The Library has nearly 6 million volumes, including 1.8 million ebooks and over 70,000 ejournals. Designed for Brown's unique catalog and users, the Library's enhanced search and catalog system, BruKnow, launched in August 2021.

Brown's librarians and library staff are available to help students locate and access the resources that they need for research, teaching, and learning via Zoom, email, in person, and through the Ask a Librarian live virtual reference and research support service.

Information technology to support online programming. Brown has invested extensively in classrooms, equipment, and video production support that will enable and enhance the learning experience of low-residency and online students. 151 out of 232 classrooms have been reconfigured with appropriate AV equipment to accommodate remote learning. Our Digital Learning & Design team developed a [Guide for Teaching in a Hybrid Classroom](#) for instructors. Other resources for instructors include guides and "how to" articles to help them create course content. Examples include [Introduction to Creating Course Videos | DLD | Brown University](#), [Digital Whiteboarding](#) and the DLD Learning Series featured on the Brown YouTube Channel: [DLD Learning Series: DIY Document Camera](#), for example.

Students access services by logging into the appropriate system (Canvas, Banner, Workday, Google) using their Brown-issued credentials. Helpdesk services are available with live support during 8:30AM to 5PM EST. Requests for assistance can also be submitted through the IT Help Desk ticketing system 24 hours a day 7 days a week. Efforts are currently underway to hire help desk staff expand the hours of operation beyond Brown's normal business hours, to implement a chat BOT feature for frequently asked questions, and to improve user experience and expand the functionality of coursetools.brown.edu and my.brown.edu, as described above in the section on technical infrastructure.

Finally, Brown has a robust inventory of equipment (laptops, audio recorders, video cameras, etc.) available to loan to students and instructors. Equipment purchased for distribution includes flexible phone tripods, overhead phone mounts, dual lavalier microphones, selfie ring lights, and drawing tablets.

University Governance. As described above, the Fellows of the Brown University Corporation provide final approval for all academic programs. This process includes approval of the tuition for each program and review of the financial sustainability of the program. The five digital education programs highlighted above were approved by the Fellows before the respective program launch dates. We anticipate that the online MPH will be presented for formal approval during the February 2022 meeting of the Corporation.

8. *Identify the learning outcomes that have been established for the proposed program(s). Describe the mission-appropriate quantitative and qualitative measures of student success (including retention and graduation rates) that have been identified for the program(s). Discuss how the institution will assess student learning in the proposed program(s) as well as how assessment results will be used for improvement.*

As discussed in previous sections, Brown's formal governance process for new educational programs requires that program proposals explicitly state learning outcomes, measures of success, assessment, and quality improvement measures. Standard measures that we track include rate of attrition, course feedback, time to degree, career outcomes, and external reviews. Evaluative measures have driven program improvements in general, and led to targeted interventions in specific programs, as described above.

To give a current example, the newly designed online MPH is structured around the following learning outcomes that are central to the successful design and delivery of public health solutions:

- *Rigorous, analytical foundation:* The curriculum places significant emphasis on developing analytical skills to prepare students to become leading public health professionals capable of addressing current global health problems.
- *Emphasis on data-driven problem solving:* Organizations at all levels of health and healthcare are looking to apply evidence-based approaches to design and implementation. Students are introduced to a variety of quantitative and qualitative data collection and analysis methods appropriate for public health context, and gain the tools to turn large data sets and behavioral science into improved policy and practice. Students will become data literate, equipped with the tools to consume and communicate data driven analyses to broader audiences.
- *Multidisciplinary exploration.* Building on Brown University's longstanding tradition of interdisciplinary teaching and research, the MPH recognizes that the problems we face are often deep and complicated and thus require many disciplines and perspectives to understand and solve. The program places special emphasis on health promotion, disease prevention, health care, human rights, environmental issues, and global governance. In addition, students will gain the necessary communication skills, intervention design and management and change management training for preparation to work in a quickly changing world.
- *Applied practice.* The Brown online MPH offers students the opportunity to apply universal public health frameworks to their unique local circumstances. The interplay between local and global is a distinct feature of this program and -- through case studies, guest speakers, and applied learning assignments -- constantly pushes students to explore effective communication, leadership skills, and policy making across borders.
- *Student-centered approach to design and instruction:* The online format of the degree allows students from a diverse range of backgrounds and professional experiences to pursue the MPH degree. As a result of its student-centered design, students may be employed full- or part-time while they are enrolled in the program. The online format provides a cost-effective alternative to students who are unable to pursue residential-based educational programs due to professional, geographical, financial, or personal constraints.

Learning outcomes for all of the programs described above are shaped by the University's mission and commitment to its core values. We expect that Brown graduates will leave the University with a balance of (1) domain specific knowledge, (2) appreciation for interdisciplinary inquiry, (3) methodological tools for analysis, (4) strategic thinking, (5) awareness of context and how geopolitical, legal, economic, cultural, and environmental factors, among others, shape decision-making and practice, (6) commitment to equity, social justice, and ethics, (7) core leadership skills like collaboration, communication, and

project management, and (8) applied and/or experiential education. The digital education programs that we deliver adhere to these broad learning goals.

In terms of the evaluation of learning outcomes, the Sheridan Center works with educational programs to design effective assessment tools that enhance student learning and are aligned with course goals and objectives. For example, through online discussions and presentations, case analysis, writing assignments, and exams, assessments in Online MPH are designed to ensure that students gain proficiency in 22 foundational competencies and 6 leadership related competencies before graduation.

9. *Discuss how the institution has reviewed the Commission's standards on integrity and its own policies and procedures on integrity to ensure the appropriate consideration of any relevant issues. Provide information about how the proposed program(s) will be described in official institutional print and electronic publications. Discuss how the institution will ensure that students and prospective students understand the learning goals, resources, curriculum, and other aspects of the online program(s).*

The concerns of Standard 9.1-9.10 are reflected in *Building on Distinction*, Brown's strategic plan; the *Diversity and Inclusion Action Plan*, as mentioned above; the *Faculty Rules & Regulations*; and they inform the ethics and operations of all academic units and support units.

Each of the academic programs has its own website; please refer to the URLs provided in the preliminary pages of the report. Each site displays learning objectives, outcomes, degree requirements and an overview of the curriculum, the program schedule, a roster of affiliated and core faculty, and an explanation of the mode of delivery. Each program is also required to make available a student handbook. All of these materials are annually reviewed by the program and the School of Professional Studies to ensure that they serve students as well as possible as policy and procedure documents of record. The programs also review the content of the handbook during orientation to ensure that students know how to locate it and understand it.

Conclusion

During the past decade, and especially over the course of the last eighteen months, Brown University has taken steps to ensure that its digital education degree programs offer students an outstanding educational experience and the opportunity to earn a Brown degree even if they are not able to be in residence in Providence. In an effort to support and expand such offerings, the University has made structural and organizational changes, invested in technological infrastructure, enhanced student support, created innovative opportunities for faculty to develop expertise, and refined policies to ensure that digital education meets the same high standards as residential education. The combined efforts of the Academic Innovation Unit, the School of Professional Studies, and the Sheridan Center for Learning and Teaching, with support from the University administration and the engagement of numerous faculty, have laid the groundwork for success in this area. We moreover believe that the measures that are being taken to support digital education, especially in terms of careful attention to course design and learning outcomes, will in fact enrich teaching and learning for all students, whether residential or remote.

Appendices

- A. Memorandum of Understanding with IE Business School
- B. NECHE data table
- C. Current degree programs: 5-year projections
- D. Online MPH: Financial and budgetary planning

Appendix A

Memorandum of Understanding with IE Business School

MEMORANDUM OF UNDERSTANDING

BETWEEN
IE University
AND
Brown University

IE BROWN EXECUTIVE MBA PROGRAM

This document serves as official arrangement of shared responsibility between IE University, Spain (hereinafter "IE") and Brown University, Providence, Rhode Island, USA (hereinafter "Brown") for the academic quality and design, administrative duties, faculty guidelines and student services and policies for the Executive Master of Business Administration (EMBA) program awarded jointly by IE University and Brown University.

IE and Brown, working under a February 2009 Memorandum of Understanding and December 2010 Agreement, developed an Executive MBA Program (hereinafter referred to as the "Program ") to be offered by IE in collaboration with Brown. Under this arrangement the students earned their degree from IE Business School and a certificate indicating the completion of some courses within the degree from Brown.

This current Memorandum of Understanding shall apply with respect to students graduating from the Program in 2020 (i.e., students whose enrollment began in March of 2019) and beyond. Those students (as well as future students enrolling in the Program) will receive a joint degree from both IE and Brown. The official program title, used in all instances by both institutions, shall be the "IE Brown Executive MBA." This Memorandum of Understanding replaces and supersedes the Memorandum of Understanding between IE and Brown which applied with respect to students graduating from the Program in 2016 (i.e. students whose enrollment began in March of 2015) and beyond.

Governance

Program Oversight

Governance of the Program is through a joint Oversight Committee of senior representatives of each institution and individuals specifically associated with the Program. For Brown , the committee membership shall consist of the Dean of the Graduate School, the Academic Director of the Program and the Dean of the School of Professional Studies ("SPS"). For IE, the committee membership shall consist of the Dean of the Business School, the Vice-Dean of Global and Executive MBA Programs, the Academic Director of the Program and the Director for International Relations.

The Program Oversight Committee shall convene and communicate, in person or through electric means, on a regular basis to ensure the quality and effectiveness of the Program in addition to assessing outcomes and discussing any new directions or concerns, including any Program changes to the *IE Brown Executive MBA Student Handbook* and the *IE Brown Executive MBA Academic and Administrative Handbook*. At a minimum the committee will convene at least twice every calendar year.

It is the responsibility of the respective Oversight Committee members to assure that changes are submitted for appropriate review and approval of governing bodies at their respective institutions as required. The Program's Oversight Committee will report at least annually to the most senior academic officers at both Brown and IE on prior year Program performance, projected future Program performance, any significant changes in Program design or arrangements and to request annual budget approval.

Academic Oversight

The Program has Academic Directors at each institution who work with their respective faculty colleagues to ensure effective curricular content, appropriate teaching assignments, and development of all academic information used to describe the Program and deliver instruction to students. The Academic Directors coordinate their respective faculty and ensure coherent curricular design. The Academic Directors must collaborate and agree on all curricular matters and effectively communicate these to senior officers on their campuses and to Program staff who implement various aspects of the Program. Academic Directors must gain the written approval of their administrative leadership colleagues before creating any substantive change in the Program in order to ensure effective implementation of new plans and to receive approval for any matters with budgetary implications. Should the two Academic Directors or the academic and administrative officers of the Program disagree on any matter, the Oversight Committee will determine the appropriate course of action.

At Brown the Academic Director chairs a committee of Brown faculty members responsible for all academic matters and collaborates with the administrative leadership to ensure academic quality for the Program. The IE Brown Executive MBA Steering Committee serves as the link to the faculty-at-large within departments throughout the university. As with all other Brown graduate programs, the program must be reviewed periodically by Brown's Graduate Council. Further, significant academic program changes proposed by the Steering Committee must be submitted for review and approval by Brown's Graduate Council. Membership on this committee is for three years, staggered terms, with the Provost responsible for appointing new members and the chair with guidance from the current committee members. The Executive Director for the Program serves as staff to this committee and is responsible for committee scheduling, agendas, minutes and notification of others as to committee recommendations and decisions.

At IE the Academic Director is responsible for IE Program content and coordination of the overall Program curriculum with Brown. The IE Academic Director is responsible for obtaining similar reviews and approval within IE. The Executive Director from IE is also appointed for 3 years, confirmed on an annual basis. The (IE) Executive Director for the program also serves as staff to this Academic Director.

Administrative Oversight

Administrators at each institution are charged with overall Program oversight and the implementation of all aspects of the Program including effective comprehensive design (curriculum and Program features coherently engaged), marketing and student recruitment/admission/enrollment, ensuring and recording all governance reviews and approvals (campus committees, external accreditations), all electronic systems (marketing and web pages, registration, learning management system, official records, post-degree engagement, etc.), online course development, site-based arrangements and all financial matters. Officers at both institutions are in regular communication to ensure effective Program operations. Responsibilities and quality outcomes are reviewed regularly with changes in duties agreed upon at this level) and reported to the Oversight committee, as are recommendations for Program quality enhancement and new features in line with student interests and market evolutions. Program application, enrollment, performance and financial data are also reported by these officers on an annual basis. IE University and Brown University will each manage all student records for this program. The parties acknowledge that student education records are governed by the Family Educational Rights and Privacy Act (FERPA) and Brown University's FERPA Policy, and may also be protected by the

General Data Protection Regulation (EU) 2016/679 (GDPR) . Each party agrees to abide by FERPA, Brown University's FERPA Policy and applicable provisions in the GDPR in its handling of student education records and agrees not to disclose student education records to any third party without the prior written consent of the student, except as otherwise permitted by the laws of the United States.

At Brown the administrative responsibilities are led by the Dean of the School of Professional Studies (SPS). An Executive Director assigned to lead the Program activities at Brown assures interaction between the Academic Director and Program functions at Brown and particularly in Brown SPS, including information sharing and essential discussions with directors for marketing, outreach and public relations, online development, registration, finance and all administrative services. The roles of Academic and Executive Director may be combined if appropriate.

At IE the Dean of the Business School has authority for the program and delegates to the Vice-Dean of Global and Executive MBA programs. The Vice-Dean of Global and Executive MBA Programs will be supported by the Executive Director for the program, and others who implement the supporting functions for the program.

The Program

The Program is designed as a blended (intensive residential and online) executive Program targeted at experienced managers, entrepreneurs and professionals who have approximately 10 years of work experience and at least three years in a leadership role. The Program will be comprised of a minimum of 320 contact hours delivered in no less than a 1-year period.

Program Structure and Content

- Faculty members from both IE and Brown teach in the Program. Each institution teaches a minimum of 40% of the Program's academic sessions and conversely no institution teaches more than 60% of the Program's academic sessions.
- Program start and end dates will be recommended by the Program Executive Directors and approved by the Oversight Committee as documented in their official meeting minutes.
- Program online and face-to-face schedule and locations will be recommended by the Program Executive Directors and approved by the Oversight Committee as documented in their official meeting minutes.
- Changes to Program courses and session counts must be approved per the governance structure outlined above.
- Target Program size (number of students in a cohort) and number of simultaneous cohorts will be considered annually as part of the quality review and budgeting process led by the Oversight Committee. Targets will be documented in the Oversight Committee's official meeting minutes and final approval will be documented in the annual, jointly approved letter of instruction to the academic and administrative officers. Cohort size will be in the range of 45 to 60 students, divided into two sections.

Admissions Criteria

Applicants are required to submit materials required by both the Brown and IE graduate admission offices. Admission committees at each institution review all application materials and discuss applicant selection

according to the established criteria for admission. Details on the admission process are outlined in the *IE Brown Executive MBA Academic and Administrative Handbook*.

Graduation Requirements

Students will be required to earn all credits and comply with the requirements outlined in the *IE Brown Executive MBA Student Handbook*. A student who fails to meet the Program's academic requirements will be asked to leave the Program.

Student Conduct, Grievance Procedures and Violations and Alleged Violations of the Academic Code of Conduct

Policies and procedures governing this Program adhere to existing Brown and I E policies and procedures and as amended from time to time. The following provides clarification of the meaning of specific titles as they relate to the issues of academic code, student conduct and grievance procedures for this Program as referenced in the following Brown University documents: *Academic Code: Graduate Student Edition*, *Code of Student Conduct*, *Faculty Rules and Regulations*, *Graduate Student Grievance Procedures*, and *Graduate School Handbook*. In this Program:

- "Faculty" may refer to faculty of either Brown or I E;
- "Staff" may refer to staff of either Brown or IE; and
- "Department Chair" may refer to a Department Chair or to a Director and/or Executive Director of the Program.

Student conduct: The *Brown University Code of Student Conduct* in its current form or as amended from time to time and other policies applicable to students such as the Sexual and Gender-Based Harassment, Sexual Violence, Relationship and Interpersonal Violence and Stalking Policy, will apply to student conduct issues in all cases except when the student conduct in question occurs in Spain, in which case the policies of IE Business School will apply.

Grievance procedures: IE Business School policies will apply to student grievances that are brought in conjunction with courses in which Brown faculty has no teaching responsibility, or in instances in which the grievance has no Brown University component. In all other instances Brown University policies regarding student grievances as set forth in the *Faculty Rules and Regulations* and *Graduate Student Grievance Procedures* as currently written or as amended will apply.

Violations and alleged violations of the academic code of conduct: The *Brown University Academic Code, Graduate Student edition*, as amended from time to time, will serve as the guiding document when it comes to issues pertaining to academic conduct and violations thereof. While the aforementioned document will guide policies and procedures, the jointly administered nature of this Program does require alternative procedures in some areas. In particular, references made to decisions and actions pertaining to and/or made by the Dean of the Graduate School, will, in the context of this Program, be meant to mean decisions and actions that are taken jointly by Brown University's Dean of the Graduate School and IE Business School's Dean of Programs. Likewise, references made to decisions and actions pertaining to and/or made by an Associate Dean of the Graduate School, will, in the context of this Program, be meant to mean decisions and actions that are taken jointly by the Brown University Associate Dean of the Graduate School and I E Business School Vice-Dean of Global and Executive MBA Programs.

Should the Associate Dean of the Graduate School, Brown, and the Vice-Dean of Global and Executive MBA Program at IE, decide that the allegations warrant a formal hearing, these two individuals will co-chair the Standing Committee hearing the case. If there is not agreement between these two individuals on the merits of the allegation, the allegation will be deemed to not rise to the level of a formal hearing. In the case where a formal hearing is warranted, the Standing Committee shall, in addition to the aforementioned administrators, consist of two faculty members from Brown, selected as per the guidelines in the *Brown University Academic Code, Graduate Student edition*, and two faculty members from IE, selected in accordance with guidelines from that university. Once formed, Standing Committee procedures and practices will follow guidelines set forth in the *Brown University Academic Code, Graduate Student edition*. Student appeals to rulings handed down by the Standing Committee are made to the Dean of the Graduate School, Brown University, and to the Dean of Programs at IE Business School (or their designees) whose decisions will be final.

Should the Deans or their representatives not reach agreement about the appeal the decisions of and sanctions imposed by the Standing Committee shall remain in place. Technology-enabled meetings are acceptable for any and all deliberations in the process.

Awarding of Degrees

Upon successful completion of the Program, Brown and IE shall jointly award students the Executive MBA degree. A diploma reflecting this degree will be approved by standing committees at both institutions as is the case in the awarding of all other degrees at each institution.

Financial Arrangements

Program Tuition

Tuition for the Program shall be established on an annual basis by the Oversight Committee and approved by the standing processes for tuition approval at each institution. Current tuition and payment terms are outlined in the IE Brown Executive MBA Student Handbook. The Oversight committee will approve a financial aid budget as part of the overall annual budgeting process. A Financial Aid Committee comprised of equal representation of IE and Brown representatives will review and approve scholarship decisions. IE will be represented by the Financial Aid Director and the Associate Director of Admissions. Brown will be represented by the Associate Dean, Finance and Planning, and Program's Executive Director (from Brown).

Income management

As agreed upon by the Oversight Committee during the annual budgeting process and as documented in the official meeting minutes one of the institutions (the "income administrator institution") will collect application fees and tuition money from students or their sponsors and distribute cash payments to the non-income administrator institution per a schedule documented in the *IE Brown Executive MBA Academic and Administrative Handbook*.

Tuition (less financial aid) and application fees collected by the income administrator institution from Program participants and/or their sponsors will constitute the Program Revenue for each student intake. Program Revenue less approved Program Expenses will constitute Program Net Income for each student cohort which will be shared evenly between Brown and IE. There will be one (1) Final Liquidation and Settlement for each graduating student cohort. Details on approved Program Expenses are documented in the *IE Brown Executive MBA Academic and Administrative Handbook*.

Any operating losses that are realized by an institution based on the allocation set forth above shall be recognized and the validity agreed upon by both institutions. These expenses will be carried forward to be

offset by subsequent income from the next student cohort intake. Such non-compensated losses will be paid prior to the normal distribution of future Program Revenue. If parties agree not to continue the Program or if Program income is not sufficient to cover total direct expenses of both institutions, Program Revenues shall be distributed in proportion to direct expenses incurred by each party.

Survival of Obligations

The parties hereby agree that all financial obligations of the parties set forth in this Memorandum of Understanding must be met even after the expiration or termination of the Memorandum of Understanding.

Independent Contractor

IE and Brown shall each remain separate entities throughout the Memorandum of Understanding. Employees of one party will not be considered employees or agents of the other party as a result of this Memorandum of Understanding and nothing in this Memorandum of Understanding is intended to, or shall be deemed to, establish any partnership or joint venture between the parties.

Each party acknowledges and agrees that except as specifically provided in this Memorandum of Understanding, no license of any trade mark, patent, copyright or other intellectual property right or contractual right is either granted or implied by this Memorandum of Understanding from either party to the other and that aside from the rights granted to each party hereunder, all property and rights to property of each party shall be reserved by such party.

Term and Termination

The term of this Memorandum of Understanding will be two (2) years, beginning upon its signature.

If either party breaches a term of this Memorandum of Understanding, the other may send written notice of the breach, including a reasonable cure period of not less than 30 days. If the breach is not cured within that time, or if the parties do not reach a satisfactory agreement on extending the cure period, then the non-breaching party may terminate this Memorandum of Understanding effective immediately upon written notice.

Either of the two parties may terminate their participation in this program for reasons of institutional priorities, financial performance or other rationale, by providing the other party with three months written notice of termination.

In the event this Memorandum of Understanding is terminated by either party while any programs identified in the Memorandum of Understanding addendum are underway (defined as having enrolled students), the parties shall continue to perform their obligations hereunder to allow students who have begun the program at the time of termination to complete said program and receive their degrees and/or certificates if applicable.

Formal Disputes

In the event that a dispute cannot be resolved by the governance representatives of Brown and IE that results in damages to either party requiring legal intervention the laws of the state of Rhode Island in the U.S.A. shall apply.

Entire Agreement

This Memorandum of Understanding, including any addendums hereto, constitutes the entire agreement between the parties with respect to the subject matter hereto and supersedes any prior or contemporaneous

written, oral or implied understandings, representations and agreements of the parties relating to the subject matter of this Memorandum of Understanding.

SIGNATURE PAGE FOLLOWS



Dr. Richard Locke
Provost
Brown University
Date:

10-3-19



Dr. Salvador Carmona
Rector
IE University
Date: 10/01/19

MP53300919

Appendix B

NECHE Data Table

APPENDIX B. Proposed Degree Program and Certificate Information

Proposed Degree Program or Certificate Name	Level of Degree (A, B, M, D) or Certificate (C)	Initiation Date (First Enrollment)	Number of Required Credits	No. of Credits Which May be Completed Online	Projected Student FTE Enrollment Year 1 (c)	Projected Student FTE Enrollment Year 2 (c)	Number of FT Faculty Available to Teach in Proposed Program or Certificate (d)
IE-Brown Executive MBA	M	2015	51	see note b	55	55	450
Technology Leadership	M	2017	32	see note b	40	45	52
Healthcare Leadership	M	2013	32	see note b	20	30	125
Cybersecurity	M	2016	32	32	30	40	32
Program in Innovation Management in	M	2006	32	8	100	110	52
Online Master of Public Health	M	2022 (a)	44	44	50 (22-23)	100 (23-24)	130

NOTES

(a) The residential MPH, on which this program is based, was established in 2000. As described in the Report, an online MPH is currently being reviewed through internal governance processes, with approval anticipated by early 2022.

(b) 60% of course content is online, but no course is completed fully online.

(c) Programs in rows 3-7 are already offered, and enrollment in Year 1 is current, while Year 2 reflects the projected cohort size for 2022-23. For the online MPH, Year 1 is (projected) 2022-23 and Year 2 is 2023-24.

(d) For the IE-Brown MBA and the Online MPH, available faculty include all who would be eligible to teach, consistent with Brown's commitment to having regular faculty teach in digital education programs. For the E-MBA, this includes all tenure-stream faculty in the Humanities and Social Sciences; for the MPH, all core faculty within the School of Public Health.

Appendix C

Existing Programs: 5-year Projections

SPS EMBA Projectons

Assumptions	Annual % Increase
Tuition	3.0%
Payroll	2.5%
Program Expenses	3.0%

	FY21 Actual	FY22 Budget	FY22 Forecast	FY23 Projection	FY24 Projection	FY25 Projection	FY26 Projection	FY27 Projection
FY22								
Enrollment	54	55	55	55	55	55	55	55
Revenue								
Tuition	-	-	-	-	-	-	-	-
Other Revenue	2,035,303	2,546,247	2,475,721	2,605,379	2,683,540	2,764,046	2,846,968	2,932,377
Total Revenue	2,035,303	2,546,247	2,475,721	2,605,379	2,683,540	2,764,046	2,846,968	2,932,377
Compensation								
Faculty Salary and Fringe	266,341	248,476	248,476	254,687	261,055	267,581	274,271	281,127
Staff Salary and Fringe	113,672	288,607	290,515	297,778	305,223	312,853	320,675	328,691
Seasonal Staff	-	30,360	30,360	31,119	31,897	32,694	33,512	34,350
Student Wages	37,087	77,874	77,874	79,821	81,816	83,862	85,958	88,107
Total Compensation	417,100	645,317	647,225	663,405	679,990	696,990	714,415	732,275
Student Aid	-	-	-	-	-	-	-	-
Operating Expenses								
Supplies and General	191,963	216,550	191,550	197,297	203,215	209,312	215,591	222,059
Purchased Services	82,226	208,090	208,590	214,848	221,293	227,932	234,770	241,813
Property Costs	-	149,586	149,586	154,074	158,696	163,457	168,361	173,411
Travel	29,484	43,487	49,622	51,111	52,644	54,224	55,851	57,526
Internal Services	36,453	84,734	94,484	97,319	99,839	102,434	105,108	107,862
DLD Billings	-	15,000	-	-	-	-	-	-
Total Operating Expenses	340,126	717,448	693,833	714,648	735,688	757,359	779,680	802,671
Internal Transfers	-	24,389	24,389	25,120	25,874	26,650	27,450	28,273
Allocated Expenses	485,729	15,448	15,448	15,912	16,389	16,881	17,387	17,909
Total Indirect Costs	485,729	39,837	39,837	41,032	42,263	43,531	44,837	46,182
Total Expenses	1,242,955	1,402,601	1,380,894	1,419,085	1,457,941	1,497,880	1,538,932	1,581,128
Revenue Share	-	-	-	-	-	-	-	-
Surplus/(Deficit)	792,348	1,143,646	1,094,826	1,186,294	1,225,599	1,266,167	1,308,036	1,351,249

SPS EMHL Projectons

Assumptions	Annual % Increase
Tuition	3.0%
Payroll	2.5%
Program Expenses	3.0%

	FY21 Actual	FY22 Budget	FY22 Forecast	FY23 Projection	FY24 Projection	FY25 Projection	FY26 Projection	FY27 Projection
FY22								
Enrollment	13	20	20	20	30	40	40	40
Revenue								
Tuition	1,576,000	1,564,000	1,357,000	1,853,800	2,153,421	3,201,372	4,051,395	4,172,936
Other Revenue	-	-	-	-	-	-	-	-
Total Revenue	1,576,000	1,564,000	1,357,000	1,853,800	2,153,421	3,201,372	4,051,395	4,172,936
Compensation								
Faculty Salary and Fringe	153,169	261,109	455,114	466,492	478,154	490,108	502,360	514,919
Staff Salary and Fringe	298,033	400,121	407,864	418,061	428,512	439,225	450,206	461,461
Seasonal Staff	66,701	14,700	14,700	15,068	15,444	15,830	16,226	16,632
Student Wages	323	25,222	25,222	25,852	26,499	27,161	27,840	28,536
Total Compensation	518,226	701,151	902,900	925,472	948,609	972,324	996,632	1,021,548
Student Aid	201,300	172,500	172,500	219,880	226,476	233,271	240,269	247,477
Operating Expenses								
Supplies and General	157,117	234,600	243,550	250,857	258,382	266,134	274,118	282,341
Purchased Services	36,291	54,700	55,200	56,856	58,562	60,319	62,128	63,992
Property Costs	-	193,733	193,733	199,545	205,531	211,697	218,048	224,589
Travel	15,362	25,865	27,660	28,490	29,344	30,225	31,132	32,066
Internal Services	15,905	67,814	75,314	77,573	86,159	94,802	96,847	98,954
DLD Billings	-	15,000	-	-	-	-	-	-
Total Operating Expenses	224,674	607,160	595,457	613,321	637,978	663,176	682,273	701,942
Internal Transfers	-	24,389	24,389	25,120	25,874	26,650	27,450	28,273
Allocated Expenses	367,166	15,448	15,448	15,912	16,389	16,881	17,387	17,909
Total Indirect Costs	367,166	39,837	39,837	41,032	42,263	43,531	44,837	46,182
Total Expenses	1,311,366	1,520,648	1,710,693	1,799,704	1,855,326	1,912,302	1,964,010	2,017,148
Revenue Share	88,211	29,400	-	17,852	98,371	425,393	688,837	711,410
Surplus/(Deficit)	176,423	29,400	(353,693)	36,244	199,723	863,677	1,398,548	1,444,378

SPS EMSTL Projectons

Assumptions	Annual % Increase
Tuition	3.0%
Payroll	2.5%
Program Expenses	3.0%

	FY21 Actual	FY22 Budget	FY22 Forecast	FY23 Projection	FY24 Projection	FY25 Projection	FY26 Projection	FY27 Projection
FY22								
Enrollment	36	40	40	40	45	45	45	45
Revenue								
Tuition	2,498,050	3,144,575	3,082,100	3,436,125	3,748,500	3,748,500	3,748,500	3,644,375
Other Revenue	-	-	-	-	-	-	-	-
Total Revenue	2,498,050	3,144,575	3,082,100	3,436,125	3,748,500	3,748,500	3,748,500	3,644,375
Compensation								
Faculty Salary and Fringe	227,437	168,167	168,167	172,371	176,681	181,098	185,625	190,266
Staff Salary and Fringe	253,666	391,838	400,699	410,716	420,984	431,509	442,297	453,354
Seasonal Staff	29,450	12,200	12,200	12,505	12,818	13,138	13,467	13,803
Student Wages	26,395	40,372	40,372	41,381	42,416	43,476	44,563	45,677
Total Compensation	536,948	612,577	621,438	636,974	652,898	669,221	685,951	703,100
Student Aid	163,125	324,553	324,553	371,933	383,090	394,583	406,421	418,613
Operating Expenses								
Supplies and General	169,707	241,950	241,600	248,848	256,313	264,003	271,923	280,081
Purchased Services	77,662	153,600	209,100	215,373	221,834	228,489	235,344	242,404
Property Costs	-	193,733	193,733	199,545	205,531	211,697	218,048	224,589
Travel	28,006	25,265	31,360	32,301	33,270	34,268	35,296	36,355
Internal Services	36,050	96,014	95,764	98,637	102,861	105,497	108,213	111,010
DLD Billings	-	15,000	-	-	-	-	-	-
Total Operating Expenses	311,424	725,562	771,557	794,704	819,810	843,955	868,824	894,439
Internal Transfers	500	24,389	24,389	25,120	25,874	26,650	27,450	28,273
Allocated Expenses	585,651	15,448	15,448	15,912	16,389	16,881	17,387	17,909
Total Indirect Costs	586,151	39,837	39,837	41,032	42,263	43,531	44,837	46,182
Total Expenses	1,597,649	1,702,528	1,757,384	1,844,642	1,898,061	1,951,289	2,006,032	2,062,334
Revenue Share	450,200	721,024	662,358	525,189	610,645	593,080	575,014	522,073
Surplus/(Deficit)	450,201	721,024	662,358	1,066,294	1,239,794	1,204,131	1,167,453	1,059,967

SPS PRIME Projectons

Assumptions	Annual % Increase
Tuition	3.0%
Payroll	2.5%
Program Expenses	3.0%

	FY22 Budget	FY22 Forecast	FY23 Projection	FY24 Projection	FY25 Projection	FY26 Projection	FY27 Projection
FY22							
Enrollment	80	90	100	110	120	120	120
Revenue							
Tuition	2,879,446	3,199,384	3,661,517	4,148,499	4,661,404	4,801,247	4,945,284
Other Revenue	-	-	-	-	-	-	-
Total Revenue	2,879,446	3,199,384	3,661,517	4,148,499	4,661,404	4,801,247	4,945,284
Compensation							
Faculty Salary and Fringe	43,334	43,334	44,417	45,528	46,666	47,833	49,028
Staff Salary and Fringe	462,354	462,354	473,913	485,761	497,905	510,353	523,111
Seasonal Staff	-	-	-	-	-	-	-
Student Wages	57,866	57,866	59,313	60,795	62,315	63,873	65,470
Total Compensation	563,554	563,554	577,643	592,084	606,886	622,058	637,610
Student Aid	353,974	353,974	364,593	386,797	422,663	475,711	551,480
Operating Expenses							
Supplies and General	77,575	77,575	79,902	82,299	84,768	87,311	89,931
Purchased Services	50,000	50,000	51,500	53,045	54,636	56,275	57,964
Property Costs	-	-	-	-	-	-	-
Travel	-	-	-	-	-	-	-
Internal Services	4,050	4,050	4,172	4,297	4,426	4,558	4,695
DLD Billings	-	-	-	-	-	-	-
Total Operating Expenses	131,625	131,625	135,574	139,641	143,830	148,145	152,589
Internal Transfers	-	-	-	-	-	-	-
Allocated Expenses	-	-	-	-	-	-	-
Total Indirect Costs	-	-	-	-	-	-	-
Total Expenses	1,049,153	1,049,153	1,077,810	1,118,522	1,173,380	1,245,915	1,341,679
Revenue Share	-	-	-	-	-	-	-
Surplus/(Deficit)	1,830,293	2,150,231	2,583,707	3,029,977	3,488,025	3,555,332	3,603,605

SPS Cybersecurity Projectons

Assumptions	Annual % Increase
Tuition	3.0%
Payroll	2.5%
Program Expenses	3.0%

	FY21 Actuals	FY22 Forecast	FY23 Projection	FY24 Projection	FY25 Projection	FY26 Projection	FY27 Projection
FY22							
Enrollment	20	25	30	40	50	60	60
Revenue							
Tuition	1,212,000	1,741,920	2,153,013	2,956,805	3,806,886	4,705,311	4,846,470
Other Revenue	-	-	-	-	-	-	-
Total Revenue	1,212,000	1,741,920	2,153,013	2,956,805	3,806,886	4,705,311	4,846,470
Compensation							
Faculty Salary and Fringe	451,930	573,289	587,622	602,312	617,370	632,804	648,624
Staff Salary and Fringe	23,420	31,105	31,882	32,679	33,496	34,334	35,192
Seasonal Staff	14,829	3,200	3,280	3,362	3,446	3,532	3,621
Student Wages	956	948	972	996	1,021	1,046	1,073
Total Compensation	491,133	608,542	623,756	639,350	655,333	671,717	688,510
Student Aid	114,867	136,834	140,939	145,167	149,522	154,007	158,628
Operating Expenses							
Supplies and General	505	2,000	2,060	2,122	2,185	2,251	2,319
Purchased Services	32,223	35,000	36,050	37,132	38,245	39,393	40,575
Property Costs	-	-	-	-	-	-	-
Travel	1,288	21,368	22,009	22,669	23,349	24,050	24,771
Internal Services	-	-	-	-	-	-	-
DLD Billings	-	-	-	-	-	-	-
Total Operating Expenses	34,016	58,368	60,119	61,923	63,780	65,694	67,665
Internal Transfers	-	-	-	-	-	-	-
Allocated Expenses	260,727	591,084	608,816	627,080	645,893	665,270	685,228
Total Indirect Costs	260,727	591,084	608,816	627,080	645,893	665,270	685,228
Total Expenses	900,744	1,394,827	1,433,629	1,473,519	1,514,528	1,556,687	1,600,029
Revenue Share	90,969	-	-	-	-	-	-
Surplus/(Deficit)	220,287	347,093	719,384	1,483,285	2,292,358	3,148,624	3,246,441

Appendix D

Online MPH: Financial and Budgetary Planning

ENROLLMENT PROJECTIONS											
		100	125	150	175	200	225	250	275	300	
ONLINE MPH REVENUE	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8	YEAR 9	YEAR 10	PROJECT TOTAL
	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL
TOTAL REVENUE	\$0	\$1,373,332	\$3,182,697	\$5,554,690	\$7,151,663	\$9,207,767	\$11,772,598	\$13,842,473	\$15,201,226	\$15,657,263	\$82,943,708
EXPENSES	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8	YEAR 9	YEAR 10	PROJECT TOTAL
	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL
A. SALARIES											
Faculty and Teaching Scholars- Teach	\$0	\$144,200	\$222,789	\$229,473	\$236,357	\$243,448	\$250,751	\$258,274	\$266,022	\$274,002	\$2,125,315
Faculty - Course design	\$70,000	\$72,100	\$74,263	\$76,491	\$78,786	\$81,149	\$83,584	\$86,091	\$88,674	\$91,334	\$802,472
Faculty Director	\$105,750	\$108,923	\$112,190	\$77,037	\$79,348	\$81,729	\$84,181	\$86,706	\$89,307	\$91,987	\$917,158
Program Manager	\$75,000	\$77,250	\$79,568	\$104,151	\$134,094	\$172,646	\$220,736	\$259,547	\$285,023	\$293,574	\$1,701,588
Admissions	\$27,500	\$56,650	\$58,350	\$60,100	\$61,903	\$63,760	\$65,673	\$67,643	\$69,672	\$71,763	\$603,013
Academic Advisors	\$0	\$61,800	\$143,222	\$249,961	\$321,825	\$414,350	\$529,767	\$622,912	\$684,056	\$704,578	\$3,732,471
Student Support Coach	\$0	\$38,797	\$89,911	\$156,920	\$202,035	\$260,120	\$332,576	\$391,050	\$429,435	\$442,318	\$2,343,162
Student Support Coach	\$0	\$20,943	\$48,536	\$84,709	\$109,063	\$140,419	\$179,532	\$211,098	\$231,819	\$238,773	\$1,264,893
Career Counselors	\$0	\$37,767	\$87,524	\$152,754	\$196,671	\$253,214	\$323,747	\$380,668	\$418,034	\$430,575	\$2,280,954
Student Engagement Counselors	\$0	\$18,883	\$43,762	\$76,377	\$98,335	\$126,607	\$161,873	\$190,334	\$209,017	\$215,288	\$1,140,477
Field Placement Counselor	\$0	\$18,883	\$43,762	\$76,377	\$98,335	\$126,607	\$161,873	\$190,334	\$209,017	\$215,288	\$1,140,477
Program Administration	\$55,000	\$56,650	\$58,350	\$76,377	\$98,335	\$126,607	\$161,873	\$190,334	\$209,017	\$215,288	\$1,247,831
Marketing Analyst	\$23,500	\$24,205	\$24,931	\$25,679	\$26,449	\$27,243	\$28,060	\$28,902	\$29,769	\$30,662	\$269,401
Recruiter	\$61,000	\$62,830	\$64,715	\$66,656	\$68,656	\$70,716	\$72,837	\$75,022	\$77,273	\$79,591	\$699,297
Subtotal-Salaries	\$417,750	\$799,881	\$1,151,872	\$1,513,063	\$1,810,193	\$2,188,613	\$2,657,065	\$3,038,916	\$3,296,136	\$3,395,020	\$20,268,508
B. PART-TIME											
Subtotal-Part-time	\$0	\$32,445	\$33,418	\$34,421	\$40,228	\$51,794	\$66,221	\$77,864	\$85,507	\$88,072	\$509,970
C. FRINGE BENEFITS											
Subtotal-Benefits	\$123,236	\$238,236	\$342,142	\$448,763	\$536,823	\$649,266	\$788,470	\$901,931	\$978,346	\$1,007,696	\$6,014,908
D. RECRUITMENT OPERATIONS											
Subtotal-Travel	\$15,000	\$15,450	\$15,914	\$16,391	\$16,883	\$17,389	\$17,911	\$18,448	\$19,002	\$19,572	\$171,958
E. OTHER OPERATING EXPENSES											
Marketing	\$1,000,000	\$1,070,000	\$1,144,900	\$1,225,043	\$1,310,796	\$1,402,552	\$1,500,730	\$1,605,781	\$1,718,186	\$1,838,459	\$13,816,448
Digital Learning Design for Instruction	\$86,520	\$89,116	\$91,789	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$267,425
Digital Learning Design for Instruction	\$0	\$0	\$0	\$18,358	\$18,909	\$19,476	\$20,060	\$20,662	\$21,282	\$21,920	\$140,666
Supplies - recruitment	\$15,000	\$15,450	\$15,914	\$16,391	\$16,883	\$17,389	\$17,911	\$18,448	\$19,002	\$19,572	\$171,958
Technology - Slate	\$25,000	\$25,750	\$26,523	\$27,318	\$28,138	\$28,982	\$29,851	\$30,747	\$31,669	\$32,619	\$286,597
FERPA compliance	\$5,000	\$5,150	\$5,305	\$5,464	\$5,628	\$5,796	\$5,970	\$6,149	\$6,334	\$6,524	\$57,319
Accreditation/Re-accreditation	\$50,000	\$0	\$0	\$0	\$0	\$0	\$0	\$30,747	\$0	\$0	\$80,747
Subtotal-ODC	\$1,181,520	\$1,205,466	\$1,284,430	\$1,292,574	\$1,380,352	\$1,474,195	\$1,574,523	\$1,712,535	\$1,796,473	\$1,919,094	\$14,821,160
TOTAL DIRECT EXPENSES	\$1,737,506	\$2,291,477	\$2,827,775	\$3,305,211	\$3,784,480	\$4,381,257	\$5,104,189	\$5,749,693	\$6,175,462	\$6,429,454	\$41,786,504
	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8	YEAR 9	YEAR 10	10 YEAR TOTAL
TOTAL REVENUE	\$0	\$1,373,332	\$3,182,697	\$5,554,690	\$7,151,663	\$9,207,767	\$11,772,598	\$13,842,473	\$15,201,226	\$15,657,263	\$82,943,708
TOTAL DIRECT EXPENSES	\$1,737,506	\$2,291,477	\$2,827,775	\$3,305,211	\$3,784,480	\$4,381,257	\$5,104,189	\$5,749,693	\$6,175,462	\$6,429,454	\$41,786,504
SURPLUS/DEFICIT	-\$1,737,506	-\$918,145	\$354,922	\$2,249,479	\$3,367,184	\$4,826,510	\$6,668,409	\$8,092,780	\$9,025,763	\$9,227,809	\$41,157,203