



THE UNIVERSITY
OF QUEENSLAND
AUSTRALIA

Faculty of Science Capital Management Plan 2018

Submitted: September 2017

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Table of Contents

TABLE OF CONTENTS	2
1 SCIENCE SUMMARY	2
2 EXISTING SPACE ALLOCATIONS	4
2.1 BUILDING CONDITION REPORTS	6
2.2 ST LUCIA CAMPUS	7
2.3 GATTON CAMPUS	7
2.4 OTHER SITES	8
2.4.1 LONG POCKET	8
2.4.2 PINJARRA HILLS	8
2.4.3 MARINE RESEARCH STATIONS	8
2.4.4 DAYBORO	8
3 DRIVERS OF CAPITAL EXPENDITURE	9
4 COMPLETED AND PLANNED INFRASTRUCTURE WORKS 2012-2017	11
5 FACULTY OF SCIENCE CAPITAL MANAGEMENT PLAN 2018-2020	14
5.1 MAJOR CAPITAL PROJECTS >\$25M	14
5.1.1 PROPOSED PROJECTS – 2018	14
5.1.2 PROPOSED PROJECTS – LONGER TERM	15
5.2 MAJOR CAPITAL PROJECTS \$2-25M	15
5.2.1 PROPOSED PROJECTS – 2018	15
5.2.2 PROPOSED PROJECTS – LONGER TERM	17
5.3 MINOR CAPITAL PROJECTS \$200K- \$2M	17
5.3.1 PROPOSED PROJECTS – 2018	17
5.3.2 PROPOSED PROJECTS – LONGER TERM	19
5.4 MINOR CAPITAL PROJECTS <\$200K FOR 2018	19
5.5 FEASIBILITY STUDIES FOR 2018	21
1 SCIENCE SUMMARY	

The Faculty of Science was established in January 2009 following the reorganisation of the Faculty of Biological and Chemical Sciences and sections of the Faculty of Engineering, Physical Sciences and Architecture. In January 2011, it merged with the Faculty of Natural Resources, Agriculture and Veterinary Science, and in 2014 the School of Biomedical Sciences was transferred to the newly created Faculty of Medicine and Biomedical Sciences. In July 2017, management of the Office of the Director, Gatton Campus was allocated to the Faculty of Science, adding all of the buildings, infrastructure and property at Gatton to the Faculty's portfolio. The Faculty of Science FTE staff load

2017 includes approximately 605 academic staff and 425 professional FTE staff (including staff within the Office of the Director, Gatton Campus). Though largely based at St Lucia and Gatton, the Faculty also undertakes activities at Pinjarra Hills and Dayboro, and Research Stations are also maintained on North Stradbroke Island and Heron Island. The Faculty of Science comprises six Schools, four Faculty and University Centres, and seven specialised research and teaching service providers.

Our Schools:

- School of Chemistry and Molecular Biosciences (SCMB)
- School of Agriculture and Food Sciences (SAFS)
- School of Mathematics and Physics (SMP)
- School of Biological Sciences (BIOL)
- School of Veterinary Science (SVS)
- School of Earth and Environmental Sciences (SEES)

Our Faculty and University Centres:

- Australian Equine Genetics Research Centre (AEGRC)
- Centre for Biodiversity and Conservation Science (CBCS)
- Centre for Microscopy and Microanalysis (CMM)
- Terrestrial Ecosystem Research Network (TERN)

Our Research and Teaching Service Providers:

- Heron Island Research Station (HIRS)
- Moreton Bay Research Station (MBRS)
- Central Boating and Diving (CBD)
- Central Glasshouse Services (CGS)
- Science Workshops (SW)
- Chemical Store (CS)
- Office of the Director, Gatton Campus (ODGC)

2 EXISTING SPACE ALLOCATIONS

The Faculty of Science undertakes teaching and research within many buildings across various locations, both on and off the UQ main campuses. These buildings include a number in the University’s high profile locations such as: the St Lucia Great Court; central walkway buildings at Gatton, and Heron Island within the World Heritage Listed Great Barrier Reef Marine Park. The Faculty of Science’s Usable Floor Area (UFA) is approximately 113,671m² or 22.8% of the total UFA available across the University.

Within the Faculty of Science’s UFA, the School of Agriculture and Food Sciences occupies the largest space holding (20%) of all the Faculty’s Schools and its activities span both St Lucia and Gatton campuses (Figure 1). The Office of the Director, Gatton Campus is the service provider with the largest space allocation within the Faculty (27%). The Faculty of Science, Office of the Executive Dean (Faculty OED) also occupies a sizable amount of space (11%), which includes; the administration spaces for the Faculty Office, Faculty of Science Student spaces, the four Faculty and University Centres, and the six research and teaching facilities.

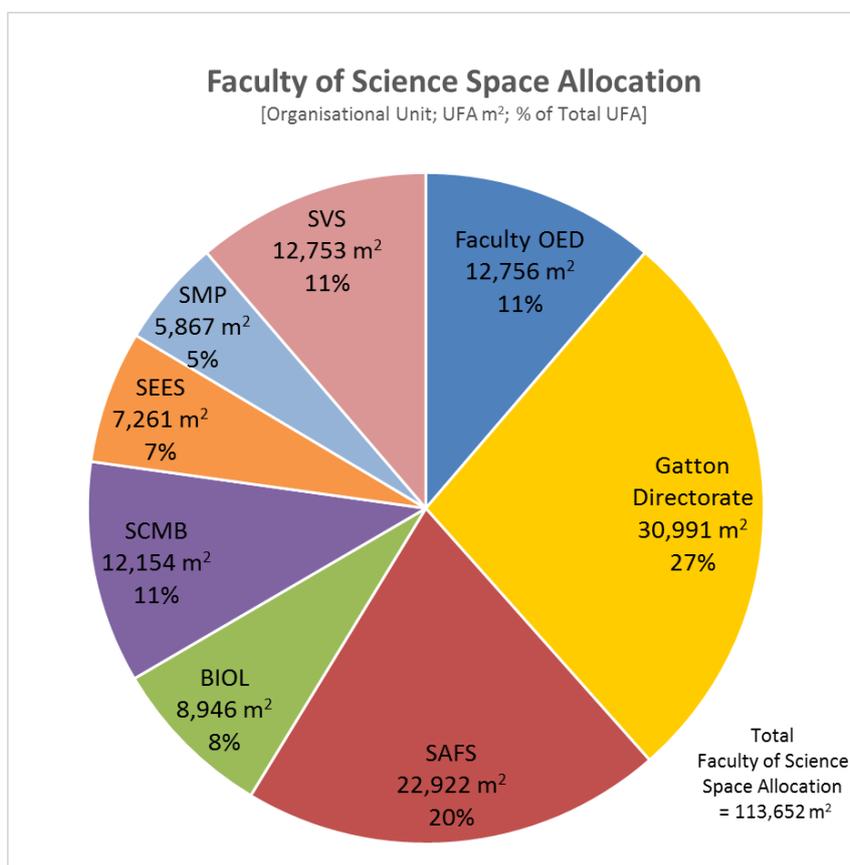


Figure 1 Proportion of space allocation by the organisational units for the Faculty of Science.

The Faculty of Science requires a diverse range of specialised infrastructure for both its research and teaching endeavours. This infrastructure is utilised by a broad range of disciplines, many of which require generic teaching, administration and ancillary spaces, along with specialised research and teaching laboratories and support facilities (Figure 2).

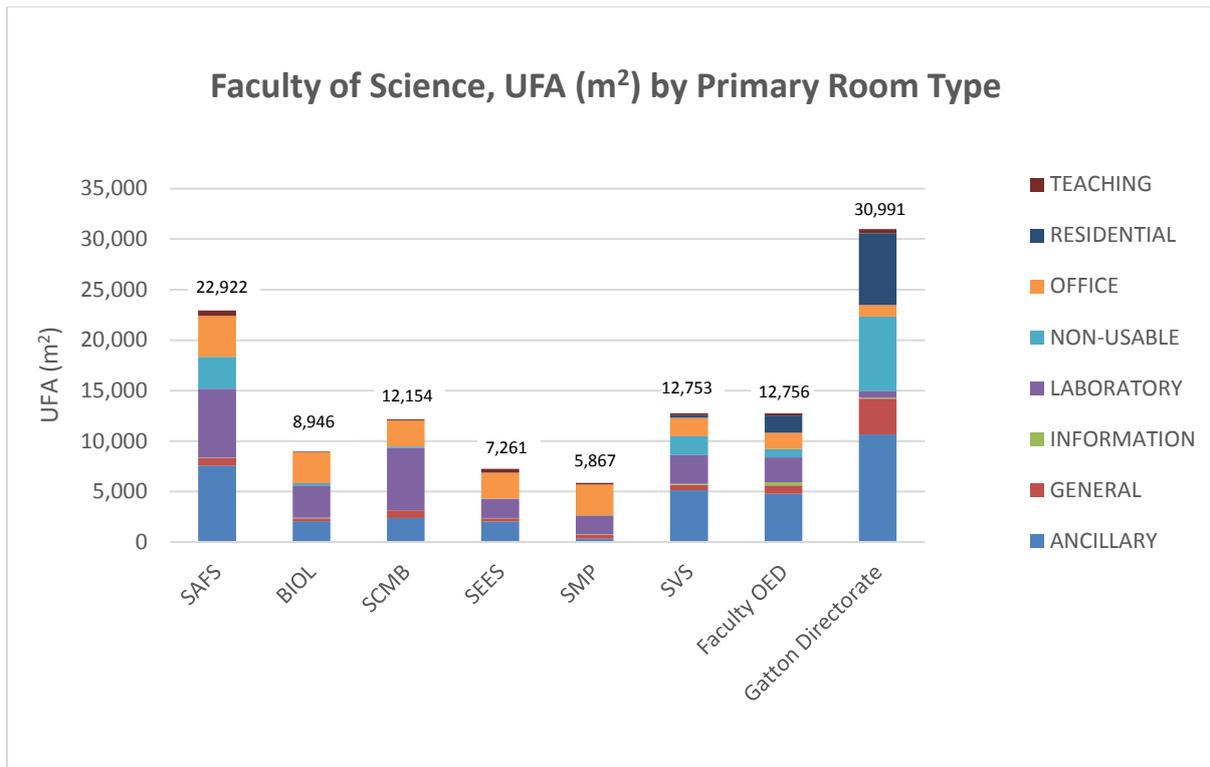


Figure 2 Total Usable Floor Area, divided into primary room type, currently occupied by the organisational units for the Faculty of Science.

Laboratory infrastructure comprises 23% (25,856m²) of the Faculty of Science’s space holding (Figure 3). This infrastructure includes: general wet and dry laboratories; Physical Containment (PC) 2 and PC3 laboratories; temperature, vibration and electromagnetically controlled laboratories; clean rooms; and, animal surgical suites and clinics. The large proportion of teaching and research laboratory space is a key consideration in the Faculty of Science’s infrastructure planning. Given the specialised nature of laboratories, constructing and maintaining these facilities requires considerably more funds than for Faculties that require only standard teaching and office space.

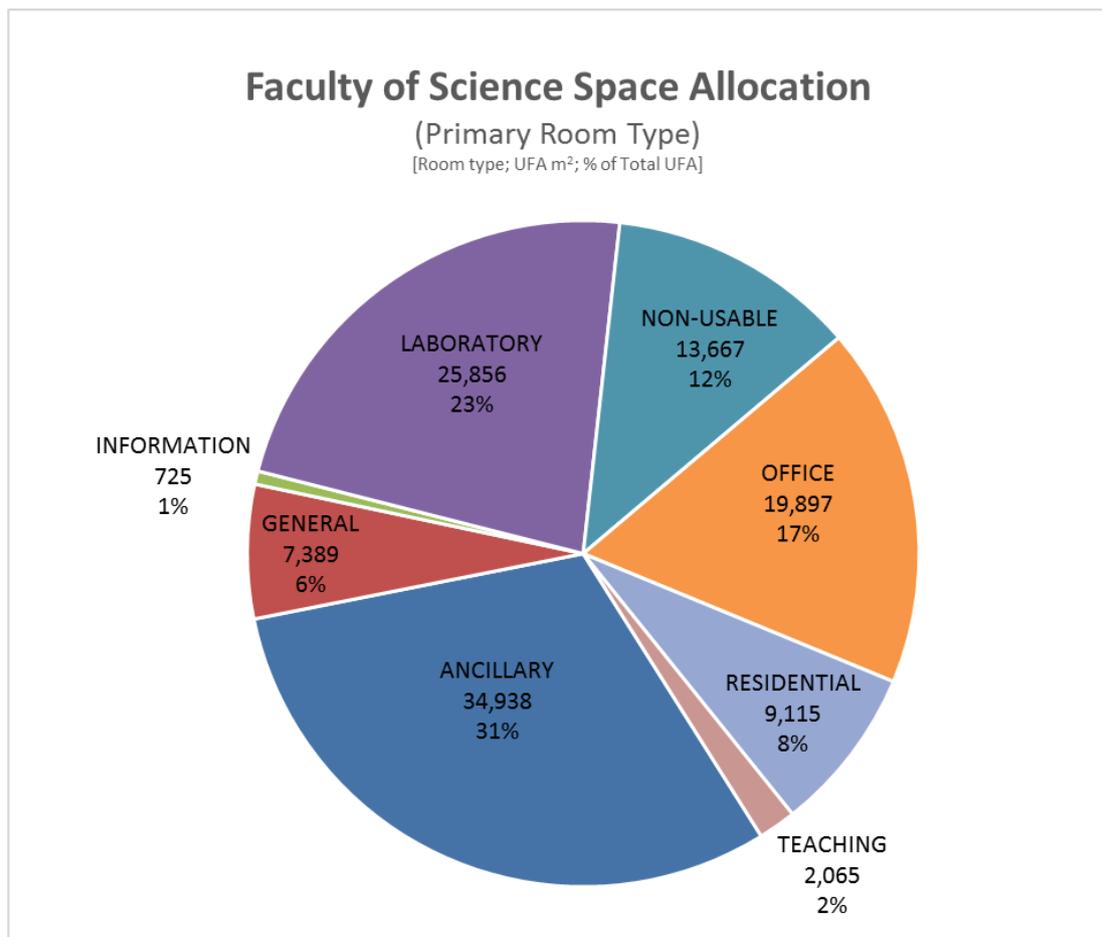


Figure 3 Total Usable Floor Area, divided into primary room type, currently occupied by the organisational units for the Faculty of Science.

The Faculty has a large proportion of ancillary spaces (31%), categorised by a diverse range of uses from temperature controlled plant growth areas to office storage. An audit of the ancillary and non-usable space category will be undertaken in 2018. The next major category is office space, which makes up 17% of the Faculty's holding. This space accommodates academic and professional staff and also includes a large cohort of Research Higher Degree (RHD) students integral to the life of a research intensive Faculty. A small quantity of teaching space (2%) is allocated for specialised teaching, though the majority of teaching space used by the Faculty (excluding laboratories) is allocated to Central Teaching Space Management. The total area for some primary room types within the Faculty (Figure 3) has increased significantly since inclusion the Office of the Director, Gatton Campus into the Faculty's portfolio. Key areas of increase include Ancillary (44% increase), Non-Usable (117% increase), Residential (360% increase) and General (93% increase). Additionally, the Gatton Campus site includes 1068 hectares of property to support the teaching and research endeavour.

2.1 Building Condition Reports

The condition of existing Faculty infrastructure varies significantly. The latest major buildings to be constructed and occupied by the Faculty were completed at St Lucia and Gatton in 1993 and 2010 respectively. Most buildings occupied by Science are significantly older, and at best have undergone only partial refurbishment, with the quality and extent of refurbishment also varying significantly. As a result, the Faculty's buildings are a patchwork of high to low quality spaces. The condition of the

infrastructure impacts the success of the University through influencing the student campus experience, impacting the quality of learning experiences and supporting the expansion and diversification of research capabilities.

The condition of the University's infrastructure is currently being reassessed, however the previous review indicated that the infrastructure occupied by the Faculty of Science received (on average) low quality ratings.

2.2 St Lucia Campus

The Faculty of Science has a major presence in 20 buildings across the St Lucia campus, including four in the high profile Great Court Precinct. The Faculty's space footprint at St Lucia is approximately 47,816m², including ancillary facilities such as plant growth and boating and diving facilities. The St Lucia infrastructure occupied by the Faculty of Science varies in levels of quality and functionality. To enhance the experience for Science students, significant refurbishments are required to upgrade antiquated teaching spaces into modern teaching facilities, more compatible with active, student-centred pedagogies.

In relation to research, the precise, practical nature of the disciplines within the Faculty of Science demands similarly high-quality, often purpose-built infrastructure. In order to maximise both the University's return on investment and research output, it is crucial that steps are taken to ensure research infrastructure remains optimal to enable and enhance research and comply with relevant regulatory frameworks.

2.3 Gatton Campus

The Faculty's Schools (SAFS and SVS) have a major presence in 13 buildings at the Gatton campus, many of which are high profile due to their location on Main Drive and along the Avenue of Palms. The Faculty's space allocation within the Schools and their ancillary facilities is approximately 25,496m². In the last 10 years, a number of new buildings and major refurbishments have occurred at Gatton, such as the Veterinary Science buildings and Plant Industries Building refurbishment. However, a large proportion of Faculty occupied buildings are in substandard condition. The Office of the Director, Gatton Campus is responsible for 30,991m² of space (27% of total Faculty allocation) and includes residential colleges and agriculture infrastructure to support teaching, research and operations. Many of the buildings are in poor condition and some are unable to be occupied due to latent conditions.

Many of the buildings at Gatton are not compatible with the current teaching and research requirements of the Faculty. The Faculty is in the process of implementing a number of initiatives to promote the campus as an attractive research and teaching destination, including the creation of a Plant Sciences Precinct to enable the relocation of agricultural sciences from St Lucia. To support the strategic growth of the campus, sufficient infrastructure is required, including: office space for academic staff and RHD students; teaching and research laboratories; and ancillary space such as plant growth facilities.

2.4 Other sites

2.4.1 Long Pocket

The Faculty of Science has a relatively small holding of facilities at Long Pocket (758m² of UFA) which are diversely used. The site is predominantly used for plant growth research in the refurbished Grevillea Building (1017) and for storage by various Schools. Further utilisation of the Long Pocket site is desirable for research-focussed groups and industry collaborations, however extensive refurbishment of the infrastructure would be required to facilitate this. A masterplan for the proposed strategic use of Long Pocket would enable the Faculty to align its space requirements with UQ's vision.

2.4.2 Pinjarra Hills

While the School of Veterinary Science once made extensive use of the site, with facilities now at Gatton Campus, the Faculty now has a greatly reduced presence at Pinjarra Hills, currently occupying 2,275m² of UFA. The current activities on this site are not infrastructure intensive and the Faculty plans to utilise this site only for specialised projects that cannot be undertaken at other locations. SEES aim to upgrade existing spaces allocated to them to move research materials that are stored at St Lucia to Pinjarra Hills.

2.4.3 Marine Research Stations

The Faculty operates two marine research stations, the Heron Island Research Station (HIRS, 2,997m² of UFA) on Heron Island and the Moreton Bay Research Station (MBRS, 1,443m² of UFA) at Dunwich on North Stradbroke Island. Both comprise research and teaching spaces, accommodation for researchers and student groups and associated support infrastructure. The quality of space at MBRS is increasingly dated and the station has only limited research space and associated support infrastructure. This impacts MBRS's ability to support high-end research within the Moreton Bay region.

Heron Island Research Station has adequate research and teaching space, however key support infrastructure needs to be continually upgraded due to the hostile environment. Of greatest concern is the deteriorating condition of the Station's seawater intake system, due to sand deposition over the suction point. The Faculty was successful in receiving \$5.5M in 2017 for the replacement of the seawater intake and the installation of solar panels and battery banks that will dramatically reduce the reliance of HIRS on the Heron Island Resort diesel generators to obtain power. Additionally, a number of the original buildings used for research accommodation, staff support services and client kitchen amenities contain asbestos and will require replacement in the near future.

2.4.4 Dayboro

The School of Veterinary Science operates a veterinary practice/clinical teaching site at Dayboro (429m² of UFA). The clinic facilities were recently upgraded to meet current industry standards and a house located on the site provides suitable accommodation for students visiting the clinic as part of

their rotational training. However, it is likely that the upcoming triple-accreditation visit will find that the site may need an additional space for meetings with students.

3 DRIVERS OF CAPITAL EXPENDITURE

The Capital Planning Framework supports strategic consideration and assessment of capital proposals and informs capital planning and budgeting, which is aligned with the priorities of the St Lucia Campus Master Plan. Expressions of Interest (EOI) and Capital Request Submissions (CRS) for capital funding are assessed by the Capital Management Group (CMG). The key drivers of capital works submissions are:

- **Strategic drivers.** Capital projects must align with the goals of:
 - UQ's Student Experience Strategy
 - The Teaching and Learning Strategy goals, Research and/or Engagement goals as outlined in the UQ Strategic Plan
 - The UQ Master Plan
- **Financial drivers.** Capital projects should identify a range of potential costs and benefits:
 - Quantifying impacts with a dollar value
 - Support from significant co-funding
 - Support from fundraising or philanthropy
 - Potential to increase revenue
 - Targeting areas that have not received significant capital funding
 - Integrating with active projects to realise cost effectiveness
- **Core Operations drivers.** Essential to sustain core teaching or research provision through:
 - Supporting visitor experience and/or engagement activities
 - Supporting campus experience for students and staff
 - Enabling implementation of formal review recommendations
 - Improving existing service delivery
- **Efficiency and Sustainability drivers.** Project assesses:
 - Alternative options to justify proposed plan
 - Improvements for space utilisation; resolving existing space shortages
 - Impacts to multiple UQ stakeholders

The Faculty acknowledges that finite resources are available and consequential limits building works. It further acknowledges, particularly in the present climate, that resources must be directed where they will have the greatest benefit for the University. The Faculty of Science is committed to directing resources towards capital projects that:

- Improve the overall quality of the teaching and learning environment;
- Support excellence in research endeavours through research infrastructure; and
- Demonstrate the Faculty's unique selling points to provide greater engagement with all stakeholders.

Accordingly, the Faculty has developed five criteria to evaluate and prioritise proposed refurbishments to ensure resources are aligned strategically and used effectively (more than one criterion may apply

to some projects).

1. **Compliance, Safety and Risk Mitigation**
 - a. Resolving non-compliance with current legislative and building codes
 - b. Improving safety for staff and students
 - c. Mitigating risk of reputational damage or loss to research and intellectual property

2. **Modernisation of Teaching and Research Space**
 - a. Enhancing the student learning experience
 - b. Enabling the expansion of expanding research capability and outcomes
 - c. Ensuring UQ remains competitive and is a leader in its fields

3. **Accommodating Growth**
 - a. Refurbishing space to accommodate growth in student numbers, class sizes and number of timetabled repeats
 - b. Remodelling space to accommodate new or expanded infrastructure to support research activity and equipment

4. **Efficiency and Sustainability**
 - a. Increasing space utilisation
 - b. Creation of standardised working conditions
 - c. Consolidation and relocation of business units into appropriate areas/campuses
 - d. Enhancing collaborative efforts for the academic and professional endeavour
 - e. Projects that deliver collaborations between different business units (internal and external to Faculty of Science)

5. **Enhancing the Student Experience**
 - a. Delivering students positive learning outcomes and practical experiences inside and outside the classroom or laboratory
 - b. Enabling innovation in teaching delivery
 - c. Demonstrating the University's unique selling points

4 COMPLETED AND PLANNED INFRASTRUCTURE WORKS 2012-2017

Provided below are three tables that detail the capital works and planning undertaken within the Faculty of Science from 2012 to date.

Table 1 Completed capital works 2012-2017.

Year	Building Name	Building Number	Level	Description
2012	Chemistry	68	6, 8	Refurbishment of research labs
	Chemistry	68	11	Construction of HF lab
	Parnell	7	2	Creation of RHD space and relocation of Physics Museum
2013	Goddard	8	3	Refurbishment of teaching laboratories (PC2)
	Goddard	8	3	Refurbishment of research laboratory
	Dayboro Veterinary Clinic	793	1, 2	Refurbishment of Clinic
	Steele	3	3	Planning Studio teaching space
	Plant Industries (Gatton)	8111	1	Construction of research laboratory and teaching space
	Field Ecology Facility (Pinjarra Hills)			Creation of a Field Ecology Facility
	Parnell	7	2	Refurbishment of teaching laboratories
2014	Goddard	8	5	Accommodating growth and expansion for CBCS
	Goddard	8	5	Creation of animal holding pens
	Steele	3	3	Creation of additional offices
	Building 69	69	3, 5	Relocation of iLC computer lab to level 5
	Glasshouse (Long Pocket)	1017B		Refurbishment of Glasshouse and adjoining building
2015	Hartley Teakle	83	3S	Refurbishment of office space and delivery area
	Plant Industries	8111	2	Creation of teaching laboratories and flexible learning area
	Chemistry	68	1,3, 4	Refurbishment of office spaces, teaching laboratories, workshop and loading bay
	Richards	5	1	Creation of Geomicrobiology QC2 Laboratory
	Heron Island Research Station			Maintenance work in response to the degradation of materials
2016	Hartley Teakle	83	2S	Creation of two food grade postgraduate laboratories
	Plant Industries	8111		Creation of environmental control seed storage facility
	Darbalara Beef Cattle Teaching and Research Facility (Gatton)	8601		Creation of the Darbalara Beef Cattle Teaching and Research Facility
	John Mahon Food Studies II (Gatton)	8106	1	Creation of a Vet Science Clinical Skills Laboratory

2017	Parnell Level 2, Teaching laboratory, seminar room and student space	7	2	Refurbishment of computer lab, physics teaching lab and student informal study space.
	Large Computer Lab Feasibility Study (200 capacity)	69	3	Feasibility study completed to determine a location and provide a cost estimate to create a 200+ seat computer lab and upgrade the existing iLC1 and iLC2
	Steele Level 2, Teaching laboratory	3	2	Creation of a teaching space that allows modern teaching techniques, minimises repeat classes and exposes students to cutting-edge technology used in industry and research
	Plant Industries Level 1, Seed Store, (Gatton)	8111	114	Conversion of a low-use space into a high-use research facility, providing essential infrastructure for plant research, currently unavailable at Gatton campus.
	Seddon Level 1, Seed Store	82B	B103/105	Conversion of existing unused cool room into a high-use research facility, expanding essential infrastructure for plant research.

A project report, detailing the project outcomes to the operations of the Faculty are included in Appendix II.

Table 2 Capital works projects in progress at October 2017.

Project Title	Faculty Capital Driver
Vet Medical Centre, Stage 1 works (Gatton - \$1.9M)	<ul style="list-style-type: none"> • Compliance and Safety
Heron Island Research Station, Seawater Intake and Solar Power System (\$6.05M)	<ul style="list-style-type: none"> • Modernisation of Research Space • Compliance and Safety
Australian Centre for Ecogenomics (ACE), Molecular Bioscience Building Roof-Top, Extension to accommodate staff growth (\$1.71M)	<ul style="list-style-type: none"> • Accommodating Growth • Efficiency of Location
Centre for Microscopy and Microanalysis (CMM), Hawken Building Level 2, Refurbishment to modernise for new and existing equipment (\$5M)	<ul style="list-style-type: none"> • Accommodating Growth • Modernisation of Research Space
Priestley Building Refurbishment, Levels 3 – 7, Building 69, Level 3, 7 and 8, Physics Annex Level 5 Fit-Out (\$14.89M)	<ul style="list-style-type: none"> • Accommodating Growth • Modernisation of Teaching and Research Space
Refurbishment of iLC1 and iLC2, Building 69, Level 2 (\$1.82M)	<ul style="list-style-type: none"> • Modernisation of Teaching Space • Enhancing the Student Experience • Accommodating Growth

Table 3 Capital Projects Submitted to EOI Oct 2017 (decision pending)

Project Title	Faculty Capital Driver
Science Precinct (\$320M)	<ul style="list-style-type: none"> • Compliance and Safety insert • Modernisation of Teaching and Research Space • Accommodating Growth • Efficiency and Sustainability • Enhancing the Student Experience
AIBN, Science & EQuS AIBN PC3 Labs (SCMB) Clean room, laser lab, office (EQuS) (\$22M)	<ul style="list-style-type: none"> • Modernisation of Research Space • Accommodating Growth • Efficiency and Sustainability
CMM X-Ray Facility Upgrade, Chemistry Building Level 2 (\$887K)	<ul style="list-style-type: none"> • Compliance and Safety • Modernisation of Research Facility • Efficiency of Location
Poultry Unit Amenities Block (Gatton - \$197K)	<ul style="list-style-type: none"> • Enhancing the Student Experience • Compliance and Safety
Production Animal Service Facility Upgrade (Gatton - \$171K)	<ul style="list-style-type: none"> • Accommodating Growth • Efficiency and Sustainability
Clinical Studies Centre X-Ray Tutorial Space (Gatton - \$90K)	<ul style="list-style-type: none"> • Enhancing the Student Experience • Compliance and Safety • Efficiency and Sustainability

5 Faculty of Science Capital Management Plan 2018-2020

The below tables are divided into the capital works categories detailed in the *Framework for managing maintenance, minor works and capital works memorandum* (Appendix I). This includes Major Capital Works (>\$25M), Major Capital Works (\$2M-25M), Minor Capital Works (\$200K-2M), Minor Capital Works (<\$200K) and Feasibility studies. Each category contains details on proposed works for 2018, strategic opportunities and longer term capital projects.

5.1 Major capital projects >\$25M

5.1.1 Proposed Projects – 2018

Table 4 Proposed Major Capital Projects (>\$25M) for 2018 that are ranked in order of priority.

Project Title	Rank	Org Unit	Description	Justification against capital drivers
Science Precinct	1	Faculty	The development of 3 buildings on the Seddon Complex site. These buildings will have a focus on flexible and specialised teaching and research spaces. <i>This project proposal was submitted in July 2017 and is under review at the time of writing.</i>	These buildings will incorporate teaching and research infrastructure and will create both flexible and specialised teaching and research spaces. This Precinct will incorporate collaboration and create operational efficiencies, while maximising the student experience and providing infrastructure to enable growth.
Gatton Plant Science Precinct and UQ wide Plant Growth Facilities (St Lucia and Gatton Campus)	2	SAFS, BIOL	The Plant Science Precinct will provide modern teaching and research spaces for the Gatton campus. Included is the required ancillary plant growth facilities (i.e. growth chambers, general and temperature controlled glasshouses) at Gatton and St Lucia.	The Plant Science Precinct will provide modern facilities on the Gatton campus that will allow for the expansion of agriculture and horticultural sciences. Included is the required ancillary plant growth facilities to support Plant Science at Gatton and St Lucia. St Lucia based ancillary facilities will provide precision ancillary space for advancement of agronomy teaching and research.

Table 5 Potential opportunities that may arise in 2018 that will require associated Major Capital Projects (>\$25M).

Project Title	Org Unit	Description	Justification
No items			

5.1.2 Proposed Projects – Longer Term

Table 6 Proposed Long Term Major Capital Projects (>\$25M) that are ranked in order of priority.

Project Title	Rank	Org Unit	Description
No items			

5.2 Major Capital Projects \$2-25M

5.2.1 Proposed Projects – 2018

Table 7 Proposed Major Capital Projects (\$2-25M) for 2018 that are ranked in order of priority.

Project Title	Rank	Org Unit	Description	Justification
PC3 Research Facility	1	SCMB	The construction of a 160m ² PC3 facility that is compliant with current standards. <i>This project has been incorporated into the Science-AIBN project that is under review for funding. This project proposal was submitted in July 2017 and is under review at the time of writing.</i>	This project responds to the significant infrastructure compliance issues identified in the Compliance and Condition Report (UQ OHS) and delivers a new facility that is compliant with all current standards. This new facility would also expand current research capabilities for the Faculty and UQ.
Centre of Excellence for Engineered Quantum Systems (EQuS) expansion	2	SMP	The EQuS Centre of Excellence requires an additional 320m ² of office space and 120m ² of research lab space. <i>This project has been incorporated into the Science-AIBN project that is under review for funding. This</i>	The SMP does not have space for the expansion of the Centre of Excellence. As part of the application for the Centre of Excellence, this additional space was supported by the Office of DVCR.

			<i>project proposal was submitted in July 2017 and is under review at the time of writing.</i>	
Computer Teaching Facility	3	OED	The construction of a first year 230 seat Computer Teaching Facility, and to update the existing iLC computer spaces in Building 69 into an advanced computing facilities. <i>This project proposal was submitted in July 2017 and is under review at the time of writing.</i>	First year Science courses have experienced significant growth, driving the need for a large computer teaching facility. In 2018 the SCI 1000 first year course will become mandatory and put significant pressure on existing facilities and teaching staff. The Computer Teaching Facility will enable modern and flexible pedagogies and reduce academic resources required to teach repeat courses.
Gatton Accommodation and Central Student Hub	4	ODGC, SAFS, SVS	The development of further student and visiting staff accommodation on the Gatton campus, along with the transformation of existing external courtyard and ground floor into a collaborative informal learning space for all Gatton students.	To accommodate the increasing demand for on campus student accommodation and to provide a collaborative informal learning space for all Gatton students. This space will provide all Gatton students with a protected outdoor collaborative study area that connects directly to building 8117. There is currently no similar space available throughout the central campus.
Food science teaching laboratory (Hartley Teakle)	5	SAFS	Refurbishment of deteriorating teaching laboratory space.	Refurbish to enhance safety and hygiene standards to current compliance and increase student teaching experience in specialised laboratories.

Table 8 Potential opportunities that may arise in 2018 that will require associated Major Capital Projects (\$2-25M).

Project Title	Org Unit	Description	Justification
Research laboratory refurbishment (Chemistry Building, Lv 7)	SCMB	Refurbishment of Level 7 chemistry laboratory.	Dependent on the AEGRC and will provide increase research laboratory space or a location to consolidate mass spectrometry services for SCMB.

5.2.2 Proposed Projects – Longer Term

Table 9 Proposed Long Term Major Capital Projects (\$2-25M) that are ranked in order of priority.

Project Title	Rank	Org Unit	Description
Animal Industries Teaching Laboratory (PC2)	1	SAFS	The refurbishment of two poor quality existing labs (35 capacity each) into a 120 seat teaching laboratory for animal science and animal husbandry course work. The modernisation of this teaching laboratory and compliance with PC2, would provide a much needed resource to teach large cohorts in this field.
Research laboratory refurbishment (Chemistry Building, Lv 11, 9 and 10)	2	SCMB	Upgrade of aged and deteriorating finishes and services throughout Building 68. In order of priority, level 11, 9 and 10.

5.3 Minor capital projects \$200K- \$2M

5.3.1 Proposed Projects – 2018

Table 10 Proposed Minor Capital Projects (\$200K-2M) for 2018 that are ranked in order of priority.

Project Title	Rank	Org Unit	Description	Justification
CMM research laboratory refurbishment (Chemistry Building, Lv 2)	1	CMM	Refurbishment of level 2 CMM laboratory and office space to create a consolidated, registered X-ray facility. <i>This project proposal was submitted in July 2017 and is under review at the time of writing.</i>	Refurbishment is required to accommodate one SAXS and exchange an EPS system. Scope will modernise laboratory space, increase space utilisation and upgrade services to improve safety and compliance and meet specifications of new and existing X-ray equipment.
Academic office refurbish and creation of research laboratories (Goddard Building)	2	BIOL	The refurbishment of academic and student office space, to increase space utilisation and develop research laboratory space on Level 3, South wing.	This will increase academic and student space utilisation and further research laboratory space and addressing air conditioning issues throughout the floor.

Animal Nutrition research laboratory refurbishment (Animal Studies Building, Gatton)	3	SAFS	The refurbishment of room 148 research laboratory and associated ancillary spaces.	The existing laboratory space is in poor condition and requires a substantial upgrade. An international T&R academic to commence in October 2017 and will require modern research laboratory space.
Dayboro tutorial student meeting room	4	SVS	Expansion of student accommodation and creation of a meeting room for Vet students undertaking placement at Dayboro Vet Clinic.	Dayboro Vet Clinic currently has no dedicated student study space for collaboration separate to the low quality accommodation. A dedicated student space is required for accreditation, and accommodation to increase the student experience.
Basement refurbishment for microscopy laboratory (Richards Building)	5	SEES	Conversion of the Richards building basement area into a microscopy laboratory.	The Richards Building basement was previously a seismic monitoring station that would provide sufficient vibration controlled platforms for microscopy research equipment.

Table 11 Potential opportunities that may arise in 2018 that will require associated Minor Capital Projects (\$200K-2M).

Project Title	Org Unit	Description	Justification
Gatton bike link	ODGC	Creation of a bike path to link the Gatton campus to the Gatton township.	This would create a safe and environmentally friendly means for staff and students to access both Gatton campus and the township.
Repurpose office space into research laboratory space (Goddard Building)	BIOL	Repurpose existing office space for TERN into research laboratory space.	This will be dependent of the future funding for TERN and a possible relocation to the Long Pocket campus. Space may be required to support the proposed Centre of Excellence application being developed in Plant Science.
Research lab and academic office space refurbishment (Goddard Building)	BIOL	The refurbishment of a research laboratory, with academic and student offices in rooms 256C, 256D and 256E.	The refurbishment of these spaces may be required to support the research activities of a new Head of School.
Research laboratory refurbishment (Molecular Bioscience Building)	SCMB	Refurbishment of office space 210 into lab space.	Following the departure of the ACE group from the space, Room 210 can be converted from office to research laboratory space.

Research laboratory development (Molecular Bioscience Building)	SCMB	Refurbishment of office space into lab space.	Repurposing existing office space (111, 111A, 160 and 160A) will provide additional research laboratory space for projects
Research laboratory and academic office space refurbishment (Gehrmann Building)	BIOL	Refurbishment of laboratory and office space.	The School has submitted an application for an ARC Laureate. If successful, space will need to be made available to accommodate this additional research activity.
Academic and RHD Office space refurbishment (Steele Building)	SEES	Refurbishment of office space on Level 2, South wing.	This will rationalise office space to increase space utilisation and improve collegiality throughout SEES.
Academic/RHD Office space refurbishment (Richards Building)	SEES	Refurbishment of office space on Level 2, if one of the Central teaching spaces was reallocated to the School.	This will rationalise office space to improve collegiality throughout the School and increase space utilisation.

5.3.2 Proposed Projects – Longer Term

Table 12 Proposed Long Term Minor Capital Projects (\$200K-2M) that are ranked in order of priority.

Project Title	Rank	Org Unit	Description
No items			

5.4 Minor Capital Projects <\$200K for 2018

Table 13 Proposed Minor Capital Projects (<\$200K) for 2018 that are ranked in order of priority.

Project Title	Rank	Org Unit	Description	Justification
Toilets and showers for poultry unit (Gatton)	1	SAFS	Construction of showers and toilets facilities adjacent to the poultry unit. <i>This project proposal was submitted in July 2017 and is under</i>	Students working with chickens at this facility have no access to toilets and washing facilities, which poses a health and safety risk.

			<i>review at the time of writing.</i>	
Field Storage shed (St Lucia)	2	SEES	The construction of a storage shed that is accessible for field purposes.	This will facilitate the removal of equipment from Chamberlain Building basement cage (P&F directive) and provide an accessible location for the storage of frequently used field equipment for teaching.
Teaching Laboratory Preparation area (Goddard Building)	3	BIOL	The repurpose of room 351 to a laboratory preparation area.	With increased teaching loads in laboratory space, greater efficiencies are required during lab set-up and pack-down. Conversion of the adjacent room would enable greater operational efficiencies.
Sample Archive Space (Pinjarra)	4	SEES	Development of rock and core sample storage facility in Building 406 at Pinjarra.	This would allow for curation and cataloguing of rock and core sample collections and move collections to free up space at St Lucia campus.
Clinical Studies Centre X-ray facility	5	SVS	The expansion of service in room 119 of the CSC to include X-ray services. <i>This project proposal was submitted in July 2017 and is under review at the time of writing.</i>	This will increase the teaching capabilities in the space and provide greater student interaction and experience using X-ray equipment.
Production Animal Service space (Gatton)	6	SVS	Extension of a vehicle garage and amenities shed adjacent to Building 8163. <i>This project proposal was submitted in July 2017 and is under review at the time of writing.</i>	This will provide a secure location to support the operations of Production Animal Service to enhance placement opportunities that deliver final-year students with practical competencies in production animal care.
Rock acid etching laboratory (Steele Building)	7	SEES	Conversion of room 322B to a laboratory containing a fume cupboard.	Will provide a safe environment to conduct activities without impacting teaching laboratory operations.
Rock processing facility services upgrade (Pinjarra)	8	SEES	The upgrade to services to support additional equipment.	To increase equipment diversity and enable greater utilisation of the facility to UQ and external industry partners.
Standing MRI support infrastructure	9	SVS	To install the required infrastructure for a standing MRI unit for equine veterinary	Provide the VMC equine unit with expanded capabilities to undertake MRI scans and increase student practical skills.

			services. Project to be fully funded by School philanthropic funds	
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5.5 Feasibility Studies for 2018

Table 14 Proposed Feasibility Studies for 2018 that are ranked in order of priority

Project Title	Rank	Org Unit	Description	Justification
Office space refurbishment (Physics Annex)	1	SMP	Refurbishment of Levels 3 and 4 to modernise the environment and increase space utilisation.	These levels are in poor condition and require refurbishment to finish off the internal building upgrade and provide the SMP with office space to accommodate staff and RHD student growth.
Moreton Bay Research Station Master Plan	2	OED	MBRS expansion and upgrade to align with future research requirements in Moreton Bay.	MBRS infrastructure has experienced rapid deterioration. The station has limited research space and support infrastructure available, which impacts MBRS's ability to support field research activities.
RO water unit system (Gatton)	3	SAFS, SVS	Investigation of options that will allow centralised (building) RO water reticulation to laboratories and facilities.	Individual RO systems are used throughout labs on the campus, with varying reliability and ongoing service problems. Systems have varying service contracts and a number of systems are on loan at significant expense.
Vet Medical Centre Master Plan (Gatton)	4	SVS	Expansion and upgrade to align with future research and clinical requirements in the SVS and the VMC.	Provide the VMC expanded capabilities to service a greater diversity of animals to increase student practical skills and provide operational efficiencies.
Darbalara Cattle teaching facility potable water supply	5	SVS	Investigation into the supply of potable water to the teaching and research facility	Bottled water is purchased for students, as there is no supply of potable water to the facility. Is this the most cost effective and sustainable method?