



ISIS - TRANSFORMING THE UNIVERSITIES OF THE FUTURE

The \$43 million University of Sydney refurbishment by ISIS Group Australia was a major undertaking and has resulted in a stunning collection of teaching spaces, lecture theatres and the prestigious Fisher library.

UNIVERSITY OF SYDNEY REFURBISHMENT / ISIS

In constructing a world-class teaching facility for the University of Sydney, ISIS Group Australia demonstrated an extremely high degree of planning, innovation and efficiency. The \$43 million refurbishment was a major undertaking and has resulted in a stunning collection of teaching spaces, lecture theatres and the prestigious Fisher library. The facility will enhance the University's reputation for outstanding teaching and research excellence.

The project was funded by a federal government grant through the Teaching and Learning Capital fund (ILC) with a significant co-contribution from the University. The Fisher Library component and Engineering Building also received funding from the Better Universities Renewal fund.

The brief was to provide a bright, modern and stimulating environment designed to inspire staff and motivate students. The focus of the project was the provision of shared general purpose learning and teaching spaces to manage informal and formal learning. "The learning spaces have been designed to be flexible and adaptable, infused with technology supporting a live teaching environment that encourages collaborative learning as well as formal practice.

The new lecture spaces are more open and technology enables instant information delivery through internet and media. Students are able to rely on mobile devices both for collecting information and communicating back to the teacher" commented ISIS Project Manager, George Klitsidis.

The project comprised twelve staged handovers over the five building sites, including the Fisher Library, the Peter Nicol Russell Building, the Carlsaw Building, select areas of the Engineering Building and the Wallace Theatre.

ISIS was responsible for the refurbishment and upgrade works to the multiple buildings which were carried out simultaneously.

For the first time in 40 years a complete refurbishment was undertaken of the heritage significant Fisher Library. Consultation with the original architect Ken Woolley took place. "We developed a thorough understanding of the constraints and processes associated with the design of the Fisher Building. Our focus was to seamlessly marry the old with the new, retaining features of the original design whilst introducing a dynamic look and feel and implementing an innovative integrated media system" said George.

Reintroduction of the imperial ceiling grid system and 1.2m x 1.2m square light fittings were fitted to conform to the original design. Existing materials and finishes with heritage importance were retained and sympathetically considered in the new design outcomes. New museum grade display book cases were constructed to update the Rare Books area, whilst restoring and reinstating the original heritage framework. The upgrade involved new architectural finishes, a major electrical and communications upgrade along with the replacement of air conditioning.

ISIS' commitment to sustainability was evident in their construction practices, including the installation of energy efficient movement sensor lighting systems and energy efficient flow taps, reuse of furniture and workstations, installation of rubber flooring made entirely from recycled content, and the use of low VOC paints.

All works were delivered during the normal operation of the University's calendar year. The project required thorough planning and analysis on the activities on each building and the impact to the USYD operations. Separation of works from staff, students and visitors was achieved by introducing 'round the clock shifts

At the peak of the project ISIS had a team of over 20 and had engaged 45 different subcontractors and suppliers, with approximately 260 subcontractors on site at the busiest time. ISIS staff were constantly accessible throughout the project to ensure clear, open and consistent communication with stakeholders on all aspects of the project and keep the team on target for completion and the project running smoothly.

ISIS has completed a broad variety of projects throughout Australia including a full refurbishment of Newcastle Museum, the internal fitout of the Volkswagen facility in Chullora NSW, extensive refurbishment of The Star's newest hotel "The Darling" in Sydney NSW, and refurbishment of the existing Astral Restaurant at the "The Star" in Sydney NSW.

ISIS is Australia's leading fitout and refurbishment specialist, known for an ability to deliver high quality projects on time and on budget. Based in every Australian mainland state and territory, ISIS have a wealth of experience in delivering fitouts and refurbishments for a variety of clients, across a range of sectors including office, hotels and leisure, Government, education, healthcare, lifesciences, retail, and technology and data centres. As an industry leader, ISIS has a reputation for excellence and innovation. Regardless of a project's size or complexity, ISIS harness end-to-end solutions and tailor them to meet client needs. This collaborative approach results in an ability to exceed client expectations and contributes to ISIS' reputation for quality and expertise.

For more information contact

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University of Sydney University, NSW

Below For the Sydney University refurbishment project Baratech provided co-ordination, supply and installation of the mechanical services system.



Air conditioning specialists, Baratech Pty Ltd, were contracted to supply the mechanical services to the PNR building and Fisher Library for the University of Sydney Refurbishment. The University of Sydney will benefit from a modern system that will provide indoor comfort to students and lecturers, while delivering energy savings to the University.

For the Sydney University refurbishment project Baratech provided co-ordination, supply and installation of the mechanical services system. Baratech worked closely with the consultant to install the air conditioning units which included a custom made air handling unit with chilled and heating hot water reticulation systems and local fan coil units to supplement specified areas.

An experienced team of up to 22 Baratech staff worked on the project to deliver results in a tight timeframe. This required a strong focus on project management and strong work commitment.

General Manager, Matthew Eaton said, “The challenge of this project was installing the system while the University remained operational. The PNR building was completed in three months. The installation in the Fisher Library was a more complex process which was staged over a time period of around 12 months. Most of the work was carried out at weekends and after hours. For some of the time the University ran both the current and future systems. Collaboration

with University staff, ISIS and subcontractors was undertaken to ensure a smooth handover, it was important for everyone to work side by side.”

Baratech has established itself at the forefront of the Mechanical Service industry in NSW over the last 35 years and specialises in the design, supply and construction of commercial, industrial and domestic air conditioning and mechanical ventilation systems.

Baratech have a wide diversity of residential, commercial and industrial projects including the Emporio Apartments, The Village Balgowlah and 163 Oriordan St Mascot. Current projects include the design and construction of mechanical services at a residential development, Metro Residences Chatswood and the extension of Sydney Airport.

Baratech aims to continue to live up to their reputation for quality technical expertise, innovation and ingenuity in engineering design, installation, project management and service. Their strong focus on client relationships and team of experienced and knowledgeable project managers can deliver tailored solutions to any type of project.

For more information contact Matthew Eaton at Baratech Pty Ltd, 9 Sefton Road, Thornleigh NSW 2120, phone 02 9875 3088, fax 9875 4300, website: www.baratech.com.au

Below Award-winning Arena Design Architects were responsible for the dramatic refurbishment of Lab 265 at The University of Sydney’s School of Electrical and Information Engineering



demonstration bench which can beam images of live experiments to each student’s PC workstation and to the main AV Screen,” added Colin.

New joinery in the laboratory is boldly coloured and forms a contemporary response to the former stark and dated character of the space. Thirty-six workbenches with two students working at each were installed at a ninety-degree angle to the large windows, fostering a stronger visual connection to a beautiful landscaped courtyard. “We were able to modify existing aesthetically bland benches, which were in serviceable condition, by adding yellow panels at the end of each one to define a circulation pattern for students navigating the room. These ensured the design retained visual clarity amongst the requisite electronic equipment with the clarity of the space planning highly tangible. Revitalised low-VOC recoated parquetry flooring then added a backdrop of warmth and texture to the laboratory. The project ran smoothly and all work was completed to a truly high standard.” said Colin.

Arena Design Architects is a leading architectural practice specialising in educational, community and institutional buildings. They have a varied client base and whether the commission is a new development or smaller refurbishment, they apply the same professionalism and attention to detail. They work confidently to achieve a sound understanding of each client’s needs, preparing a tailored response and turning this into distinctive high quality environments within available budgets.

Recent projects have included the Environmental Learning Facility in Orange and a Community Library in High Street Strathfield.

For more information contact Arena Design Architects Pty Ltd, 10 Charles Street Redfern Sydney NSW 2016 Australia, phone 02 9310 3436, mobile 0418 631 929, website: www.arenadesignarchitects.com.au

Lab 265 at The University of Sydney’s School of Electrical and Information Engineering has undergone a dramatic refurbishment by award-winning Arena Design Architects. The early seventies building is now a state of the art teaching facility combining the latest technologies with a dynamic, sustainable learning environment.

The brief called for the re-invigoration and redesign of an existing laboratory to accommodate an increase in capacity to 72 students and encourage lively interaction while still being highly functional. “The Laboratory required a technical and aesthetic upgrade to bring it into the 21st Century” said Architect Colin Brown, “but we also saw an opportunity to humanize what had been an overtly technical environment.”

An initial 3D Model was designed in a tight timeline of around four days. The developed model, illustrating a series of compelling iconic design concepts, enabled a strong dialogue with all University staff and ultimately with ISIS builders, to align the final documentation with budgets to a high degree of resolution early in the process.

“The laboratory boasts a 5 metre ceiling which allowed for the design and installation of a dynamic red feature ceiling which also provides acoustic softening. This gave focus to a major Breakout Zone encouraging students to collaborate around a large circular table. This zone is overlooked by the main teaching bench (dubbed Mission Control during the design process), housing an interactive audiovisual



Below Concept AV were responsible for providing the audio visual systems at the University of Sydney Refurbishment.

With a reputation for delivering state of the art, bespoke audio visual systems on time and within budget, Concept AV was selected as the contractor responsible for providing the audio visual systems across four levels of the Fisher Library Building Refurbishment at the University of Sydney.

In recognition of the fact that the use of physical spaces in libraries by students is becoming more optional due recent advances in mobile and remote access technologies, it was determined that a number of social and group study spaces should be created within the library for the purpose of collaborative learning in conjunction with standard lecture and meeting spaces.

“iPads and interactive LCD displays were deployed to control the audio visual systems installed in the listening collaborative pods across two levels of the building. The collaboration pods incorporate both individual and interactive study, research and collaborative areas.

The new POD style systems enable students to work in an interactive environment, which incorporates touch control and modern technologies to review and manipulate multiple formats of recorded information making them ideal for problem based learning activities” said Bernhard Kotarski, Director, at Concept Audio Visual.

Concept AV used their expertise in multimedia systems to address the transition from analogue to digital and created seamless integration of both digital and analogue signal flow. Concept AV also supplied the mobile teaching lectern employed in the multipurpose exhibition space along with meeting rooms and teaching spaces which all utilise interactive touch screen technologies along with multi format high definition video and premium audio.



Below Donny Painting and Tiling conducted the painting and decorating on the Sydney University Fisher Library project.

The success of Fisher Library Project is largely due to the efficiency in communication and collaboration between University Staff, the contracted architects, builders, consulting engineers and project managers. All stakeholders worked together as a team resulting in the on time delivery of a world-class teaching and learning facility.

Founded in 1990, Concept Audio Visual is an established leader in offering a complete in-house product supply, consultation, design, sales, installation, project management, training, services and after sales support. Concept AV understands that no two projects are identical and with the right people and required levels of expertise are able to deliver optimum bespoke systems on time and on budget for any application.

Concept AV also recently completed the supply and installation of new audio visual systems across 70 lecture and public spaces at the University of Technology Sydney, Audio Visual Systems at the University of Sydney Quadrangle Building Lecture Theatres, audio visual systems with integrated video conferencing and broadcasting systems at IBM Australia Cumberland Forest and a new Multi Purpose Hall and Performing Arts Theatre at Holy Spirit College Lakemba.

For more information contact Concept Audio Visual, 21/11-21 Underwood Road, Homebush NSW 2140, phone 02 8746 0500, fax 02 8746 0499, website: www.conceptav.net.au

Donny Painting and Tiling is Sydney based company that specialises in providing a broad range of painting and tiling services. Armed with a dedicated team of twenty-one and extensive knowledge in commercial and residential painting Donny Painting and Tiling can take on any size project bringing it from concept to completion on time and on budget.

Donny Painting and Tiling starting conducting the painting and decorating on the Sydney University Fisher Library in December 2011. The project comprised of four floors of the Fisher Library in various stages.

“There were two challenges to this project the first was to ensure the successful delivery of the project within strict deadlines and timeframes. The second challenge was to ensure the health and safety of the people attending the University as it continued to operate whilst the works were being carried out. We implemented rotating day, afternoon and night shifts to guarantee we delivered on time and also to ensure that people attending the university were not subject to excessive paint fumes. We used Taubmans Pure Performance paint, which is eco-friendly paint and low in volatile organic compounds, for maximum indoor air quality,” said Director of Donny Painting and Tiling, Raymond Shin.

The key to efficiency on this project was a team effort and open communication. “Good working relationships with the

Head Contractor ISIS, who impressively managed the project, other tradesman and the client ensured a smooth process and uninterrupted workflow.”

Founded in 2000, their first projects were mostly residential and Donny Painting and Tiling quickly established a reputation as one of the leading Painting and Decorating firms and moved into commercial projects. “Our goal is to exceed the expectation of every client by offering value for money, whilst delivering a quality result on time and on budget.”

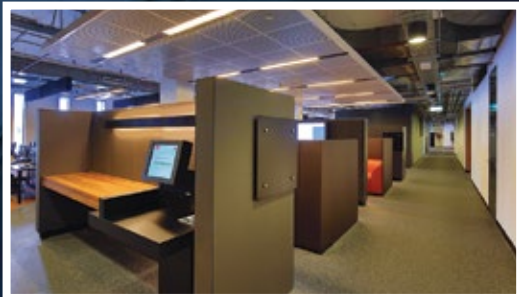
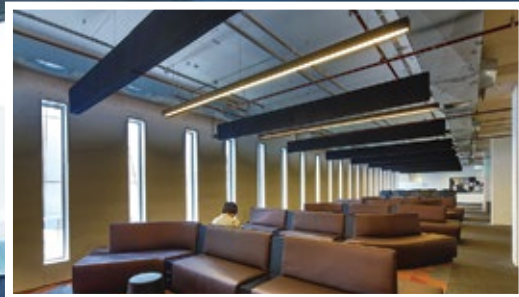
Recent projects have included the external and internal painting of the Goulburn Post Office, The Mounted Police Horse Stables and the Newcastle Museum. Donny’s Painting and Tiling travel nationally.

Future projects include the interior decoration including painting and tiling in the Sales in the Desert Hotel, Ayers Rock Resort in the Northern Territory and painting at the History refurbishment of the Blackfriars apartments owned by the University of Technology Sydney.

For more information contact Donny Painting and Tiling, 27 John Street, Lidcombe NSW 2141, mobile 0405 106223, fax 02 8819 2645, email: donnypainting@hotmail.com

Below Haworth used their extensive portfolio and expertise in customisation to create and provide tailored solutions to the University of Sydney Reurbishment.

Below Gaffney Electrical Services completed extensive work on the University of Sydney



Haworth is extremely proud to be associated with the University of Sydney refurbishment project, in partnership with Geyer and ISIS. Haworth have a rich history in the furniture industry which spans over 60 years. A family business founded with the aim of providing the highest quality furniture and service to its customers.

Haworth were engaged for their commitment to working closely with clients and the design and delivery teams to achieve the visions of the individual projects. Haworth understand the important connection between space and behaviour and the impact that has to create a positive learning atmosphere. Haworth used their extensive portfolio and expertise in customisation to create and provide tailored solutions to the PNR Building, Wallace Theatre, Carlsaw Building and Fisher Library.

“The University of Sydney wanted to move away from traditional environments to realise the vision of an open, flexible learning space that enables new ways of learning. Creating spaces and furniture settings that encourage collaboration and support learning behaviours is key to education design. The incorporation of advanced technology requires these spaces to be flexible and adaptable to evolve as needs change. Along with custom tailor-made pieces, our xFriends open platform approach allows us to provide a wider range of proprietary settings. These support the existing and emerging education approaches by creating a fluid environment to inspire learning” said Jessica Clark, Architecture and Design Market Manager.

Haworth worked very closely with Geyer over two years from the early design phase to develop integral pieces to achieve the design vision. This included a custom overhead lighting bar adaptation of the Allways workstation and a unique banquette design with integrated power. Haworth also contributed their knowledge and experience to assist in the design of the technology pods. The Haworth team thoroughly enjoyed working closely with the design and delivery teams to find innovative solutions to achieve a successful project.

Haworth Inc. is a global leader in the design and manufacturing of organic workspaces, including raised floors, movable walls, systems furniture, seating, storage and wood caseworks. Haworth is headquartered in Holland, Michigan, and serves markets in more than 120 countries through a global network of more than 600 dealers. Haworth has over 7,000 employees worldwide, has won many awards for its longstanding commitment to the environment and awards for design of flexible and adaptable furniture.

Haworth’s strategic direction begins with its core values: a passion for serving customers, serving members, embracing change, continuous pursuit of greater efficiencies and striving for unmatched excellence in quality.

For more information contact Haworth Australia, Unit 4, 37-69 Union Street, Pyrmont NSW 2009, phone 02 8586 7777

Gaffney Electrical Services are a company which can be relied upon to provide an uncompromising commitment to the safe, timely and successful completion of each project on which they work. They were contacted when the original electrical contractors could not complete the project at the University of Sydney and were able to provide personnel the next day to keep the project running to schedule. Gaffney Electrical evaluated the project and identified the work yet to be completed. Gaffney Electrical Services, who pride themselves on a high standard of workmanship, were then granted the contract to complete the works including upgrading and replacement of the lighting system, lighting control system, power system, structured cabling system, fibre and copper backbone system, communications room, rising mains, tee off boxes, distribution boards and modifications to the existing main switchboard at the University of Sydney refurbishment.

John Gaffney, managing director said “it was fantastic to work on such a challenging project. We established a great working relationship with ISIS and provided innovative solutions to enable the University to remain operational while work was undertaken. We redesigned and reconfigured the main switchboard modification works to enable three proposed full building switchdowns to be completed in just one shutdown. The new rising submains and distribution boards were installed through the existing and trading riser. A detailed sequencing program and work schedule saw this completed, greatly reducing the

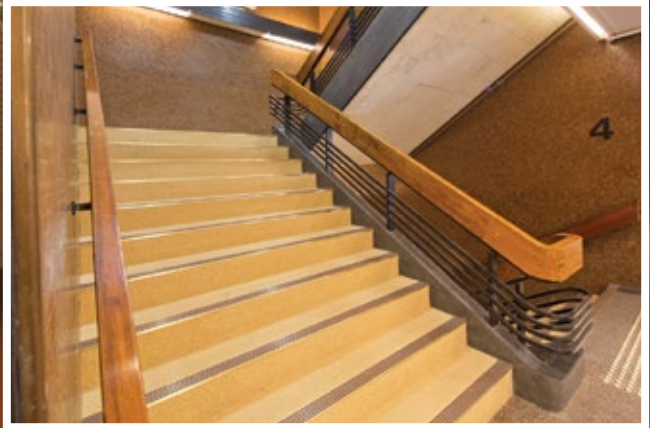
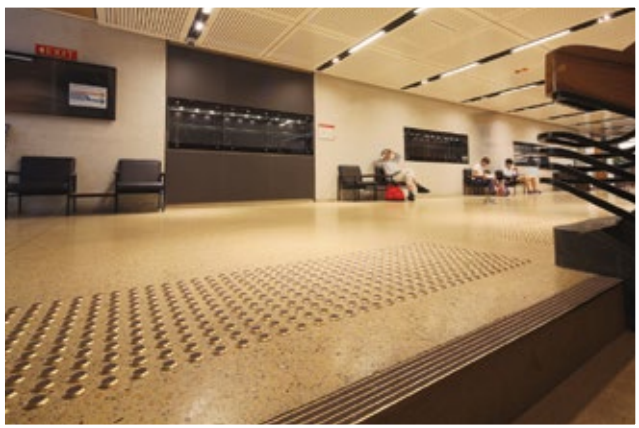
impact on the client with little disruption to the staff and students. Full credit goes to the team who worked intensively and extensively to bring the electrical section of the project, which was six weeks behind schedule, up to date”.

Established in 1995, Gaffney Electrical Services is an Australian Company that provides all aspects of electrical and communication, construction, service and maintenance servicing numerous industries including industrial, construction, manufacturing, education and utilities. Gaffney Electrical services has a strong commitment to staff training and offers an apprenticeship system which has resulted in many long term loyal and valuable employees. Gaffney also prides itself on its exemplary work safety record.

Gaffney Electrical Services have worked on many notable projects and have recently carried out work at the Claremont Meadows substation at St Mary’s NSW, the UTS Function Centre at Broadway, NSW and work at a large industrial facility at McCreddie Street, Smithfield NSW.

For more information contact Gaffney Electrical Service, U25/280 New Line Road Dural NSW 2158, phone 02 9651 5622, fax 02 9651 5722, email: admin@gaffneyelectrical.com.au

Below Merdock were contracted to install tactile indicators and stair nosing for three staircases at the University of Sydney.



Below Mars Painting provided painting services to the University of Sydney refurbishment project.



Merdock were contacted by ISIS following their quality installation of tactile indicators and stair nosing at the Star City Casino in Sydney. Merdock were contracted to install tactile indicators and stair nosing for three staircases at the University of Sydney.

The showpiece was Staircase Two of the Fisher Library and Merdock fitted solid brass stair nosing and solid brass tactile indicators. The tactile indicators were supplied by Latham Australia and have a brown silicone carbide mineral insert which will last the lifetime of the building.

The premium products provide an additional architectural feature to this prominent heritage listed landmark without detracting from the classical design, while at the same time ensuring that the areas conform with disability regulations.

Merdock believe that a team approach is important based on collaboration when working with other companies and were impressed with ISIS who were first rate in their communication and scheduling. Merdock's team of four worked night shifts for two weeks to complete their role ensuring that noise did not affect the continuous operation of the University.

Merdock take pride in their customer service record. They are able to offer solutions to difficult problems using their unique and innovative ideas. "We had difficulty fixing the tactile indicators to the concrete slab because of the Regupol non-slip flooring. To overcome this obstacle we extended

the spigots on each tactile indicator to fix them to the concrete slab". Said Director Marcus Bechara. Merdock have custom designed a drill which was used at Sydney University.

"The machine drills six holes at a time speeding up the drilling process. This unique drill resulted in significant efficiencies and time saving".

Merdock is a privately owned family business specialising in the supply and installation of tactile indicators, mechanical expansion joints and stair nosing on commercial projects.

Merdock have been setting the benchmark for superior workmanship, service and quality for over ten years in the safety industry. Marcus Bechara has built the company focusing on delivering high quality results for his clients.

With extensive experience, superior products and methods Merdock have the expertise to deliver on the most demanding and exciting projects in New South Wales.

For more information contact Merdock Pty Ltd, mobile 0414 542220, email: Marcus@Merdock.com.au

MARS PAINTING is proud to have been able to contribute to the University of Sydney refurbishment, and would like to thank ISIS for the opportunity to provide the project's painting services.

For over 35 years, Mars Painting has been providing major projects with skilful, safety-conscious and high quality painting services. Their trade qualified painters use the highest quality products, with Low VOC paints and finishes supplied when air quality and environmental protection is a major consideration.

Having a flexible workforce allows Mars Painting to meet the needs of multiple major projects simultaneously. Previous showcases of their mastery include the International Passenger Terminal at Sydney Airport, the International Passenger Terminal at the Rocks, The Hyde residential apartments, Penrith Shopping Centre and Wharf 11- Woolloomooloo and Walsh Bay, to name a few.

The company takes an educated approach to their tasks, with regular safety training for the workforce, a broad knowledge of the products and firm relationships with leading suppliers of paints, finishes and associated products. The result is services which bring a degree of excellence to every site.

For more information contact MARS PAINTING, Elias Augerinos or Marie Johnson, phone 02 9591 1595, website: www.marspainting.com.au

