

BACHELOR OF EDUCATION (TAS) – INDUSTRY ENTRY
ADDITIONAL SELECTION CRITERIA
QUESTIONNAIRE

Please complete in full, ensuring your name is at the foot of the page on all pages of the questionnaire.

NOTE: No material will be returned, therefore if attaching any documents do not provide originals. You can provide any other information/documents that you think may be relevant to your application.

- This questionnaire should be submitted with the CSU *Application for Admission* form and other required documentation.

PLEASE NOTE: *At the end of the questionnaire you will find sample/exemplars for some questions that you can use as a guide when completing this part of your application. There is also a Checklist that you can use to ensure you have included all required components of your application - do NOT include the checklist and exemplars in your application.*

1. What post-secondary education have you completed?

2. If you have completed the NSW Higher School Certificate, or its interstate equivalent, indicate:
a) year/s attempted and b) your result for English study.

3. What formal industry/vocational qualifications do you hold?

Note: *Provide certified photocopies of supporting evidence for questions 2 and 3. Please do not send originals as material will not be returned.*

NAME: _____

BACHELOR OF EDUCATION (TAS) – INDUSTRY ENTRY
ADDITIONAL SELECTION CRITERIA
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4. Give the names, positions and contact details of any people who could support your application (these can be business or characters referees).

<p>NAME:</p> <p>POSITION HELD:</p> <p>BUSINESS NAME:</p> <p>ADDRESS:</p> <p>.....</p> <p>.....</p> <p>TELEPHONE: (W)</p> <p> (H)</p> <p> (M)</p>	<p>NAME:</p> <p>POSITION HELD:</p> <p>BUSINESS NAME:</p> <p>ADDRESS:</p> <p>.....</p> <p>.....</p> <p>TELEPHONE: (W)</p> <p> (H)</p> <p> (M)</p>
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5. State any other information you think relevant to this application, this may include experience you have had in areas relevant to your teaching area and/or technology specialisation/s, working with adolescents, training/teaching, additional skills and experience related to TAS teaching. (*minimum – 250 words*)

NAME: _____

BACHELOR OF EDUCATION (TAS) – INDUSTRY ENTRY
ADDITIONAL SELECTION CRITERIA
QUESTIONNAIRE

In context of your area of industry experience and expertise please give specific examples to indicate how you have:

6. Implemented and maintained your knowledge of the past, present and emerging technologies in your industry area. *(150 words minimum)*

7. Developed design ideas and design solutions/problem-solving in your technology area and how you have documented, communicated and presented these ideas to the client. *(150 words minimum)*

NAME: _____

BACHELOR OF EDUCATION (TAS) – INDUSTRY ENTRY
ADDITIONAL SELECTION CRITERIA
QUESTIONNAIRE

8. Developed and implemented innovative, creative and enterprising solutions to design issues/problems in your industry/technology area? *(200 words minimum)*

9. Give examples of how you can ensure design decisions and choices of technology options can be appropriate, ethical, responsible and sustainable within your industry area. *(100 words minimum)*

NAME: _____

The material from this point forward is to be used as a guide only.
It does NOT need to be submitted as part of your application

BACHELOR OF EDUCATION (TECHNOLOGY AND APPLIED STUDIES)
- INDUSTRY ENTRY –

Application Checklist

- Completed & signed a CSU *Application for Admission* form or submitted online.
- Attached certified copies of the transcripts (subjects completed) of your university, TAFE or industry qualifications or other training completed or undertake to date.
- Evidence of the award of your university, TAFE or industry qualifications or other training including trade certification (e.g. Trade Certificate / Proficiency Certificate)
- A curriculum vitae / resume containing all required information.
- Statements of service attesting to the nature and length of your industry experience from your place(s) of employment
- Completed in full the BEd(TAS)-INDUSTRY ENTRY: *ADDITIONAL SELECTION CRITERIA* **QUESTIONNAIRE**
- Copies of any support materials you think will assist your application
- Evidence of change of name where any documents supplied are in a name other than the one currently used by the applicant
- Put your name on all documentation submitted

EXAMPLES OF POSSIBLE RESPONSES TO QUESTIONS

SOME OF THESE EXAMPLES ARE BASED ON PREVIOUS APPLICATIONS AND CONSTITUTE ONLY SELECTED SECTIONS OF THE APPLICANTS' FULL RESPONSE – THEY ARE OFFERED AS SUGGESTIONS ONLY, THEY ARE MODELS NOT RULES.

FOR EACH SECTION YOUR RESPONSE SHOULD BE GUIDED BY THE MINIMUM WORD COUNT.

5. State briefly any other information you think relevant to this application, this may include experience you have had in areas relevant to your teaching area and/or technology specialisation/s, working with adolescents, training/teaching, additional skills and experience related to TAS teaching.

- I have extensive experience working as part of a team, both as a leader and contributing member and believe these experience and skills will be valuable in the classroom environment as well as in my interaction with teaching colleagues and other school staff. In my position as a Site Manager I have been responsible for supervision and coordination of sub-contractors. On some sites this would involve up to 30 contractors. This required being able give clear directions, instructions and coordinating the separate trades to ensure maximum efficiency. As part of my management role I liaised with project managers, consultants and clients, working with programs and adhering to OH&S requirements.
- I have supervised and trained several apprentices, most of whom were in the 17 – 25 age group, for the period of their apprenticeship training. I have also supervised and worked with a number of high school and TAFE students participating in work placements as part of their study. The onsite training of apprentices and students is fundamental to their development in the building industry and I believe I have been able to provide valuable, enjoyable and rewarding learning experiences in a positive learning environment.

Away from the work environment I have coached a junior soccer team for four years, working with the children and their parents to building team cohesiveness and performance within the club policies and regulations.

- I have been teaching extra-curricular woodwork classes at a local Primary school for groups of 8-10 children aged 9-12 years of age for the past 18 months. I have developed a sequence of 90 minute lessons including theory and workshop activities incorporating basic skills and techniques. The workshop is organised with consideration of OH&S guidelines while providing a stimulating learning environment.

I have developed a range of design projects that build a progressive level of skills and confidence for the class. I am responsible for the costing, purchase and initial preparation of materials and am able to adjust the projects to suit the individual abilities of students.

- With 25 years experience working and training in the Hospitality industry I believe I can share these skills with high school students by becoming a teacher. As a chef, it is crucial to be able to instruct staff in response to changing menus and daily specials to maintain consistency and quality of service.

I have a passion for food and the hospitality industry and consider this as an opportunity to share this by teaching and developing students' knowledge of nutritious and flavourful food as well as their skills in production of this food. This is a continuation of what has been a major part of my career in training apprentices and new staff in a restaurant as well as passing on new techniques and skills.

- I have been employed in the general engineering industry for the last 17 years. I have specialised in a range of areas over this time, most recently working on major engineering projects: developing jig and tooling manufacture; design and installation of power systems as well as related maintenance and fabrication. I have developed high precision components using CAD drafting software and computer-controlled machinery.

I have experience teaching fitting & Machining trade courses with TAFE and VET Metals and Engineering to high school students with a local high school. I am able to relate to students in a professional manner that allows me to engage the students in a variety of learning activities. I am able to deliver lessons with consideration of individual student's varying skills and abilities while improving their technical literacy.

My current role includes responsibility as the initial training liaison officer assisting apprentices and trainees with progress through their training programs as well as delivering on-site induction for new employees. I liaise with students' on-site supervisors and workplace trainers as well as the off-site trainers at TAFE to ensure that the learners are optimising their learning opportunities and that any difficulties are addressed early.

I have developed and implemented a variety of OH&S projects to identify and address OH&S issues. I believe this experience will allow me to make sure that a 'zero harm' workplace is replicated in the school workshop and classroom.

My experience as a Life Saving Association trainer and assessor has included working with adolescents, training them to perform in a challenging environment and I have developed a good rapport with the students in this situation which will give me a solid basis for teaching in a school environment.

- I have trained several apprentices over the past 6 years as well as providing ongoing supervision of other employees. I am able to establish a good rapport with these young staff members and have a dedication to making sure they become first-class tradesmen.

I ensure trainees comply with OH&S requirements in the workplace by using safe manual handling of goods and equipment; making sure all machinery and equipment are set up and used in a safe and appropriate manner and I have modeled, taught and supervised employees in the safe use and storage of hand tools.

My job has included teaching and supervising appropriate methods of assembly and construction in the workshop and onsite; managing the effective use of resources and achievement of deadlines; production of technical drawings, plan interpretation and operation of CAD software.

As a volunteer firefighter I have organised training programs, allocated resources and conducted assessment and evaluation of team members.

6. In context of your area of industry experience and expertise please give specific examples to indicate how you have implemented and maintained your knowledge of the past, present and emerging technologies in your industry area.

- I have researched, practiced and demonstrated traditional woodworking skills in furniture manufacture using only hand tools and traditional techniques. In the workplace we produce modular and custom units made to order using a combination of traditional and computer operated/programmed machinery. I have had responsibility for the introduction and development of computer managed machinery in to the manufacturing process. This has included setting up workflows and modifying the use of materials to suit the new machinery as well as training staff to work with the new machinery and products.
- The construction industry is constantly evolving with the introduction of new products, techniques and rules and regulations to be considered. I maintain my currency of knowledge of emerging technologies through attending trade shows, internet research and subscription to print and internet-based trade magazines, membership of professional associations and introduction of new technologies and techniques as appropriate. Working closely with specialised contractors and consultants is another major source of information about new and emerging technologies.
- Cabinetry and joinery trades hold aesthetics and practicality in equal importance. New hardware, machinery and construction methods evolve to respond to changes in style and design. In the workplace trades people are constantly updated by both the suppliers sales staff as well as customer demand. In addition it is inherent in a business to be abreast of the current styles and fashion to allow them to have the capacity to respond to demand. This means that as well as receiving catalogues and demonstrations by company representatives, we also subscribe to trade magazines as well as domestic 'interior design' publications.

In regard to past practices of the cabinetry industry, this begins with the compulsory components of apprenticeship training which encompasses the traditional skills of solid timber construction techniques. This may continue into the ongoing trade skills depending on the course of the individual's career path however it remains the basis of all initial training.

- I have maintained current knowledge and skills in emerging techniques and technologies. I have gained skills in CAD and CNC to produce a range of precision engineering components. I have also utilised various plastics and polymers for use as bearing housings where high friction applications are used. I have programmed robotic components to undertake manual handling and hazardous substances.
- The proliferation of books, television and print magazines devoted to trends and developments in the food and hospitality industry makes it relatively easy to maintain currency of knowledge of past, present and emerging trends and techniques. In addition I have taken the opportunity to attend master classes run by industry leaders as well as trade shows, food festivals and, of course, eating in restaurants to experience first-hand the innovations and products. This has allowed me to research and learn about traditional ingredients and techniques from numerous regional cuisines from around the world. I have also been able to become aware of current and emerging trends to incorporate seasonal and organic produce while being mindful of issues of sustainability, food miles and animal welfare issues related to customer expectations of products coming from a healthy and ethical producer.

7. In context of your area of industry experience and expertise please give specific examples to indicate how you have developed design ideas and design solutions/problem-solving in your technology area and how you have documented, communicated and presented these ideas to the client.

- Designing and making furniture frequently demands development of design solutions to meet the client's brief as well as consideration of constraints that may be imposed by cost, available materials, location, use and purpose of an item. For example, a client required a piece of furniture based on a specific antique French style to be used to house modern technology such a television and other electronic equipment. The design must be in the style of choice but obviously the purpose of the piece is not something that is an exact copy of an original piece. I researched the traditional dimensions and style of a suitable cupboard and adapted it to suit its purpose. I then developed sketches and workshop drawings which were scanned and emailed to the client for approval. The proposal included options for various internal and external points of access for wiring as well as a range of finishes using traditional and modern techniques.

This required clear written and visual representation of the look of the piece as well as explanation of the variation in durability of the different finishing options. I developed a retractable door system which allowed a traditional piece of furniture to function as a modern entertainment unit. To maintain the visual style the modern retractable hinges could not be seen when the cupboard was shut and traditional hinges were added to the outside of the piece for decorative purposes.

This also allowed the client to decide in advance if they wanted to have a single entry-point for electrical cords to access the television etc and to use wireless technology for all other connections to minimise the cords and the access points to preserve the overall look and integrity of the piece of furniture. The client could investigate the cost of converting to wireless technology and make sure the cupboard would fulfill the range of functional requirements.

This is an example of how to interpret styles and techniques as well as adapting design to incorporate technological changes not directly impacting the production of the item.

- It is always important to develop menus that can accommodate a range of dietary requirements. This may include specific menu items, e.g. vegetarian, vegan or gluten-free options or meals that can be adapted to suit a specific need. Being able to offer a tasty seasonal menu with a range of options that is able to be produced during a busy service without compromising quality is challenging. I believe it is also important to ensure that guests with special dietary requirements at functions are served wherever possible a suitable version of the same dish as the other guests. I have developed function menus that deliver similar meals for vegan and vegetarian guests to mirror the main menu selection by adapting the dish to suit their needs. In some instances for guests with severe allergies or food intolerance this has required maintenance of a separate preparation and cooking area to ensure there was no 'cross-contamination' with any of the sources of allergy.

Recently a guest with a severe gluten allergy was proved with this service with the preparation of the meal of *Prawn Ravioli with fennel, pernod and greens* with the ravioli replaced by sautéed prawns; the main course of *Lamb with herb crust, eggplant relish and kipfler potatoes* was prepared without the crust and the *Pear tartin with ice cream and vanilla cream* was served as a poached pear dish with the same accompaniments. Both the client who hosted the function and their guest were advised of the full range of ingredients and preparation and cooking techniques to be used and I ensured the staff were fully prepared and aware of the importance of maintaining a clean and unadulterated preparation and service for the guest.

I have developed online virtual tours and floor plans of the restaurant and reception areas that can be provided to clients by email so they can look at the floor plan to check the suitability of the venue and determine the set up they require for a function. This has allowed a great deal of advance design and planning for decoration, seating plans and displays of information and products for promotional launches for businesses prior to a site visit. It also provides a reference tool should they subsequently encounter a need to amend their set up or to resolve any planning issues without having to necessarily return to our restaurant. We have a range of set up options with floor plans and sample photographs of each presentation option as well as photographs of the various menu presentations and dishes. This has been of great benefit in both assisting our clients' use of the venue as well as streamlining our operations.

- I have designed, developed prototypes and manufactured specialised harvesting machines for a range of specific crop types. This has involved research and investigation of available commercial equipment for similar types of crops. Based on this research I made engineering drawings which were then presented to the client for their feedback, the prototype was manufactured and tested, again with involvement of the client and after some minor refinements of the design the drawings, development and testing of the harvester was undertaken. The evaluation of the machines performance indicated the potential for sales to a wider range of consumers and I designed and developed a variety of jigs to efficiently manufacture the machine parts in volume.

The presentation of the project as it developed constituted a range of technical drawings and reports to the client giving a description of the changes and progress of the project. In addition on-site demonstration and trials of the machine followed by technical reports of performance based on data collected based on these trials were also given to the client.

The final version then went through the company's quality assurance procedures and was fully documented and assessed by all of the various engineering production sections of the company as well as the costing of the project by the accounts section. I presented the final results to the company board of directors using a PowerPoint presentation as well as the full range of technical and costing documents.

- Design in cabinetry is often very complex and time consuming to create. There are many components to take into account during the design process such as size, mechanisms, concealments (wiring, plumbing, etc). For example, a request for drawers within a sink cupboard must take into consideration to allow enough space for plumbing inside the cupboard while still allowing enough space for functional, reasonably sized drawers. It is important to brief the client on the restrictions and/or compromises that may be required in the selection of sink unit or the dimensions of the drawers to fit the available space.

Usually clients can view a range of design options within the display room that can be used to illustrate the available options and the various alternatives. While the display units can be a beginning point for this demonstration of design options we may also develop a range of technical drawings showing detailed plans and 3-dimensional views of the proposed design. The additional cost of not using standard module sizes is also included in the design presentation to ensure clients are clear about the impact of ordering custom made components on their overall budget for the job.

For larger jobs a scale model of a layout may be produced and/or working models of more complex individual pieces of cabinetry to illustrate the final product. In most cases the 3D and models are the most effective in communicating the design.

8. *In context of your area of industry experience and expertise please give examples of how you have developed and implemented innovative, creative and enterprising solutions to design issues/problems in your industry/technology area.*

- Recently, I redesigned the workshop space to incorporate an area that allows for dust extraction to minimise the impact on the health of staff using routers on projects. This allowed us to not only respond to OH&S issues and legislation but was also an opportunity to reconfigure the work flows to streamline production and increase productivity as well as increasing worker comfort.

I have designed and built boardroom tables with integrated power, lighting and data connections in concealed units with hydraulic power to expose them when required for use. This has required the integration of new technology as well as design solutions that allow for upgrades of systems to incorporate advancements in technology components as they are developed. This requires a knowledge of potential directions of innovation beyond my direct skill areas but that have an impact on our products as well as the use of innovative technology from within our industry. These and other products are designed with a wide range of materials to suit the style requested and may include products such as granite, vinyl, glass, various woods and metals which are combined to produce a unique artistic creations that meets the clients brief.

- *Innovative:* I have designed and built a moveable stand to tilt and empty large drums of liquid . This allowed safe single person handling and reduces the risks involved in moving and decanting large drums of potentially hazardous materials

Creative/Enterprising: Implemented a safer process for installation of roller bearings in motors. This involved the selection and installation of a suitable hydraulic press that replaced the need for staff to hit these bearings into place with soft hammers. This has resulted in a decrease in repetitive strain injuries for the workforce.

Design Issues/Problems: Developed and designed a procedure to lift 30kg roller bearings out of containers using an overhead crane. This alleviated the need for staff to perform this task manually and will lower the risk of related injuries. This process has also increased productivity as the process is now completed in less time.

- An example of using innovative solutions to overcome design issues can be illustrated by the individual modification of standard hardware used in windows bought from a supplier. If a swiveling lock is binding on an opposing sash window due to insufficient thickness of the meeting rail, grinding or sanding the hardware to allow the lock to move closer to the glass and to give more clearance from the opposing rail.

The legs and rails of tables are a good example of using creativity in design. Problems may be encountered by the floor to rail height and require the design of an original shape or modification to an existing design to the proportion of the overall table size with consideration of the purpose and function of the table and the desired aesthetic impact. Sketches and full size set outs can be drawn in early stages. Templates or 'samples' assist the development and implementation of the design with more certainty.

I recently designed a table for a family one member of which is confined to an electric wheelchair. The height of the table needed to be suitable for use by all the family and also accommodate the height of the wheelchair, which itself was individually made to suit the person's height and build. The table needed to be multi-purpose for study, computer use and meals so had to be designed with a central support to avoid any part of the table impeding access and also wide enough to accommodate computer screens and other IT peripheral units and to accommodate the family at meal times. The table also had to be able to suit chairs whose height was comfortable for use but that were able to be purchased from 'standard' stock to minimise cost. This design was developed in consultation with the family and some basic mockups of the design allowed the suitability for all requirements to be checked before the final table was made.

- It is critical to understand and interpret the particular needs and design aesthetic of your client when developing a design for a project. This must meet their brief but also be cost effective, functional and sound. I have a client who required cabinetry for kitchens and bathrooms for a unit development that had to be constructed within a very tight budget but they still expected high quality materials and finishes. The initial and most crucial stage was intensive research to source well priced quality materials. In addition I developed a design for modular units that minimises construction time and be easier to cut and assemble which then reduced labour costs and worked within budget.

Design is not limited to the individual pieces and jobs, it extends to streamlining work methods and developing an efficient and functional work environment which in the end will be the most enterprising component of your work practices. Designing storage systems and work methods specifically for your production needs achieves this necessity.

9. In context of your area of industry experience and expertise give examples of how you can ensure design decisions and choices of technology options can be appropriate, ethical, responsible and sustainable within your industry area?

- Every new project presents a range of design decisions and technology options. The response needs to take into consideration the client's needs and desires as well as the practical and cost implications of the available options. I believe that for every project the client's requirements are of paramount importance and providing the information for the client to make an informed decision includes awareness of ethical and sustainability standards in regard to materials and technologies to be utilised. As a business we make sure we identify and source as much 'green' materials and technology as possible, however the final choice is made by the client who is able to select any commercially available material suitable for the project.

By developing a breadth of knowledge about ethical and sustainable options we are able to give the client the information to consider potential cost savings of such things as sustainable design for passive heating and cooling options that while initially not necessarily the cheapest option, over the medium to long term offer substantial savings in energy consumption costs. We also stay informed about various government rebates and subsidies for solar heating, insulation, etc. We make sure we can advise on the manufacture and source of raw materials for a product as well as the comparative efficiency of a material or technology.

- There is an increasing awareness of 'eco-friendly' building options and increasingly clients expect to be able to be advised about these as options on a construction project. Customer demand as well as supplier marketing allow us to stay in touch with advancements in sustainable technology and new eco-friendly' products. It is also important to check manufacturers' claims against the various testing an user groups who publish their product testing and experience. Recently we built a set of 100 entrance doorways using a series of wall-mounted, veneered boxes around the doorways. A newly developed man-made veneer was chosen. The product was laid onto plywood and pre-lacquered. The hardwearing finish was well suited to the job requirements, saved labour in the installation and finishing costs and is available in a various designs and sizes. The products are produced from recycled wood fibres and are produced using low levels of chemicals and energy to maximise its sustainability credentials. In other projects we utilise "Forest Stewardship Council' endorsed timber which

ensures the material have been sustainably harvested. There is a wide range of FSC timbers and this allows clients to select a timber suitable for their project while acknowledging their projects impact and their responsibility for the future of the forests. As builders we also need to promote this aspect as it is essential to the ongoing sustainability of the construction industry itself.

- Ethical, responsible and sustainable choices with in industry can be related to production organisation and techniques as well as the materials used. Efficiency in production can lead to a reduction of staff injuries as well as ensure materials are used with minimum wastage. I have introduced computer operated saws, drum sanders and dust extractor systems which have increased efficiency and reduced waste as well as improve workplace conditions.

Analysis of product movement and manufacturing systems resulted in improved product management systems to rearrange storage systems to be more appropriately located, use of trolleys, pallets and forklifts to maximise efficiency and improve worker safety. These improvements also resulted in lowering of materials wastage and power consumption. In addition waste products are now sorted and recycled wherever possible and also provided to local community groups and individuals which has developed a positive community involvement for the company as well as a sustainable use of 'waste' products and lower waste removal costs.

- In the food industry there are many ethical and sustainable concepts to consider. An increasing number of customers now expect to be offered menu choices made with healthy, ethically produced ingredients. The range of options include the use of free range eggs in all dishes, the sourcing of free range, sustainable meat products that avoid the overuse of antibiotics in feedlots as well as the ethical considerations of caged and closed environments that do not allow animals to display the normal behaviours of their species.

There is a preference by an increasing number of customers for organically produced ingredients and as this demand grows, the costs of the products will fall. However, during this period of transition it is necessary to offer an ethical and sustainable option for those who are unwilling to pay the premium price incurred by using many organic products. It is possible to do this in a number of ways, for example, ensuring that the 'food miles' and the associated environmental cost of using imported products is minimised by sourcing locally produced ingredients wherever possible and by following a seasonal use of ingredients to make this a more likely option. Customers welcome the chance to support local producers and to have their choices endorse ethical and sustainable solutions.

Within the kitchen we have introduced strict recycling of all waste – where possible good quality food will be donated to charities that use restaurant donations to provide food for their clients. Food 'waste' that is not suitable for such donation is collected by local people for use in composting or for feeding pets and livestock such a chickens. It is incumbent on all section of the community to conserve as much energy and water as possible and the preparation and cooking of food in our kitchen is always done with this in mind, Washing of fruit and vegetables can be done in bowls or sinks of water not under running taps and burners, ovens and other electrical devices are turned off when not in use as well as cleaned and maintained to maximize efficiency of use and lifespan.