

National Athlete Pathway Framework Canoe Sprint





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1. INTRODUCTION

WHO IS PADDLE AUSTRALIA?

Paddle Australia (PA) is the peak body for paddling in the country. It exists to:

- Support the State Member Associations in the general running of their regional paddling clubs.
- Enable a competitive insurance scheme to run that covers paddle sports across the country.
- Manage accreditation of coaches, officials, instructors and guides.
- Promote the sport of paddling in all its disciplines across the states and territories.
- Organise national paddling events.
- Encourage the growth of paddling across the country.
- Administer funds for paddling from all sources in a transparent and fiscally responsible manner.
- Set up and maintain the Sport Performance (SP) program for Olympic and Paralympic disciplines.
 - O Work with other providers (AIS, SIS/SAS and clubs) to develop athletes and gain success at World class levels;
 - O Monitor the progress of athletes in these disciplines;
 - O Develop pathways for the development of athletes from paddling introduction to podium finishes; and
 - O Provide services for the successful implementation of these programs.

THE NATIONAL ATHLETES' PATHWAYS FRAMEWORK

The National Athlete Pathway Framework (NAPF) is a "roadmap" to guide all stakeholders in the development of the athlete from Foundation to Mastery. PA has used the Australian Institute of Sport (AIS) model for the development of its athlete pathways using the FTEM framework as its guide.

This document, along with various other support documents, provides the pathways for athlete development so that athletes can enter the system at any point and know what is next with the expectation of success in the future.

PURPOSE AND SCOPE

The purpose of the National Athlete Pathway Framework (NAPF) is to outline and monitor the athlete development pathway from learning the basics of paddling right through to elite performances.

An athletes' development occurs as part of three distinct stages. The NAPF encompasses the **Non-elite stage** where athletes develop foundation level skills before being identified and confirmed as having high performance talent at the **Pre-elite stage** and as such are provided with targeted sport-specific support and coaching to enable them to reach their full potential and progress through to the **Elite stage**, during which athletes achieve podium performances and ultimately, sustainable success on the international stage.

Further details of each phase of this pathway are outlined within this framework.

Canoe Sprint outlined below:

Discipline	Events	Distances
Canoe Sprint	K1, K2, K4, C1, C2, C4	200/500/1000m

The PA NAPF provides an outline of the likely pathway progression for athletes' development within paddling. Each athlete will enter/progress and eventually exit the pathway at varying levels, thus it has been designed to accommodate individual development as required.

This framework is suggested as a guideline only and does not reflect athlete selections or categorisations.

PA's vision is to ultimately connect with all Australians through paddle sports, recreation and performance to become Australia's favourite water sport.

The NAPF, enables PA to connect our recreational and developing participants with our elite performers in the Sport Performance Program.

This framework was developed by the Sports Performance Pathway Project Committee after extensive consultation with the National Performance Director, sports performance coaches and pathways consultants.

While PA recognises the importance of the athlete pathway from foundation stages, this document represents the key sports performance components of the pathway.

2. SPORT PERFORMANCE PROGRAM

The Paddle Australia high performance program is focused upon achieving success at the Olympic Games through the Sprint and Slalom programs.

The high-performance program within PA includes a deep reach to ensure targeted athletes are identified and nurtured along the athlete pathway. As paddling is not one of the more popular participation sports in Australia the targeted approach adopted by the PA high performance program is essential to ensure selected talent is identified early and is managed through to senior levels. Therefore, the definition of high performance within the sport of paddling cannot be quantified, as the program nurtures any talent within the pathway. However, the structured high-performance programs include; Seniors, U23s and U18s. Each squad has selection criteria and clear pathways to ensure competition, coaching and training opportunities for all potential world-class athletes.

PA supports three major streams of paddling at the Olympic/Paralympic level including Canoe Sprint, Canoe Slalom and Paracanoe. The prioritised Olympic event categories for Sprint are listed below:

Discipline	Men	Women
Canoe Sprint	K1 200/1000	K1 200/500
	K2 1000	K2 500
	K4 500	K4 500
	C1 1000	C1 200
	C2 1000	C2 500

Pizzey Park on the Gold Coast QLD is the National Centre of Excellence (NCE) for the Canoe Sprint

3. PATHWAY PRINCIPLES

WHAT ARE PATHWAYS AND FTEM?

PATHWAYS EXPLAINED SIMPLY

People participate in sport for a variety of reasons, these reasons can be reduced to three different but related pathways

- 1. Active lifestyle
- 2. Sport participation (alternative and full sport formats)
- 3. Sport Excellence

The AIS developed a framework to represent these pathways in sport and direct research. It's called FTEM and stands for

FOUNDATION

TALENT

ELITE

MASTERY

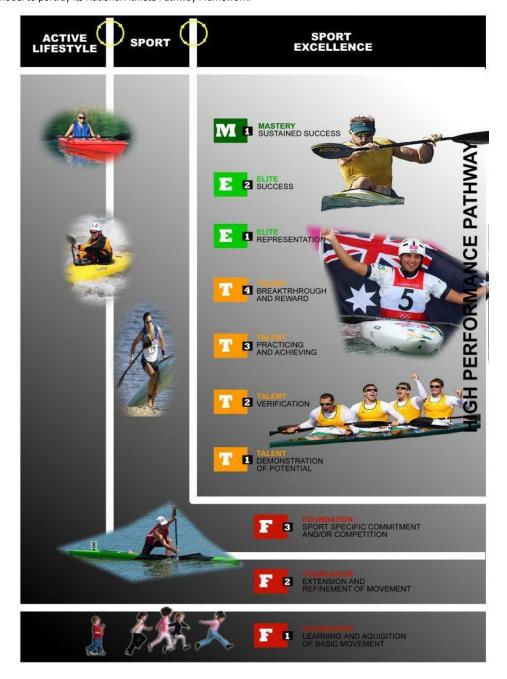
The first level (Foundation) represents those who participate for an active lifestyle and sport participation. The last three levels (Talent, Elite & Mastery) represent athletes' pathways for those who desire to excel in their chosen sport/s.

Furthermore, the model can be broken down into 10 micro phases.

F1 F2 F3	T1 T2 T3 T4	E1 E2	M	
Foundation	Talent	Elite	Mastery	

FTEM Explained:

FTEM (representing Foundations, Talent, Elite and Mastery) is a framework of athlete development. As detailed in the graphic and table below, this model consists of the four, major developmental and performance levels which are then further broken down into ten separate phases. Paddle Australia has adopted the FTEM model to portray its National Athlete Pathway Framework.



			PADDLE	AUSTRALIA Ca	noe Sprint FTEM	Stages			
Non Elite	(Foundation M	ovement)		Pre-Elite (Poter	ntial to be Elite)		Elite	(Senior Internat	ional)
	Phases and Description								
	FOUNDATION			TAL	ENT		ELI	TE	MASTERY
F1	F2	F3	T1	T2	Т3	T4	E1	E2	M1
Basic movement foundations	Extension and refinement of movement foundation	Sport specific commitment and/or competition	Demonstration of potential	Talent verification	Practicing and achieving	Breakthrough and reward	Senior National Team representation	Podium success	Sustained success at E2
				An Ath	lete is:				
Learning or relearning basic movement patterns, strength, balance and control	Paddling and keeping a canoe/kayak upright and moving	Attending coaching and/or competitions in any paddle sport	Demonstration of performance potential from training / competition and potential inclusion in a State Development Squad (SDS)	Potential verified and athlete is confirmed by inclusion in a (SDS) or National Development Squad (NDS)	Embedded in pre- elite, daily training environment and training towards selection for Junior Worlds Team	Qualifies for Junior Worlds and/or U23 National Team equivalent	Competition at World Cups, World Championships or equivalent	Finishes on podium at a World Cup, World Championships, Olympic or Paralympic Games or equivalent	Consistent podium success over four or more years
				Daily Training	Environment				
Formal or informal physical education at home or at school or similar	Paddling a craft of some description for fun or recreation	Involved in a paddle sports club and paddling regularly	Involved in a structured training program under the guidance of an accredited SDS coach and attendance at SDS camps	Involved in a structured training program under the guidance of an accredited SDS coach and attendance at NDS camps	Training under the guidance of a SIS/SAS Coach. Attend SIS/SAS camps	Training under the guidance of a SIS/SAS Coach. If invited attend National Team Camps	Training within NCE program along with attendance at National Team Camps		
				Competit	ion Target				
Not Con	mpeting	Club, School and State Events	State and National Championships	State Championships, National Grand Prix Regattas and National Championships U16 National Team	National Championships and Junior World Championships	Junior or U23 World Championships	U23 and Senior World Cup/ Championships and Olympic Games	Senior World Cup/ Championships and Olympic Games	Senior World Cup/ Championships and Olympic Games
				Athlete	Category				
		Not Categorised			Emerging	Developing	Podium Potential	Podium Ready	Podium
			Paddle Australia D	lership and Suppo evelopment Pathway 5/SAS)		Australia High Perfor	mance Pathway (SIS,	'SAS - NCE)	
Sta	te - Sprint Deve	elopment Pathw			Paddle Au	stralia - Sprin	t Performance I	Pathway	

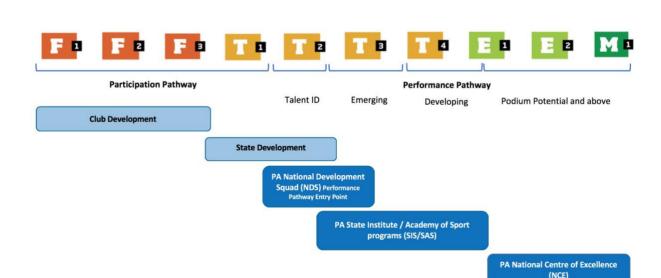
FTEM: THE PATHWAY TO PERFORMANCE



- Repeated international podium success over multiple years
- Paddle Australia Ambassador



- Podium success at a major international benchmark event
 Demonstrated team leadership and personal excellence
- ELITE REPRESENTATION
- Selection to the senior national team
 Progression towards World Class performance standards
- TALENT
 BREAKTHROUGH
 AND REWARD
- Achievement of a breakthrough performance and/or reward
 Full time training with an NCE or SIS/SAS high performance squad
- TALENT
 PRACTISING
 AND ACHIEVING
- Increased investment in practice and competition
 Progression towards Inr & U23 benchmark performance standards
- TALENT VERIFICATION
- TALENT Init
- Verification of talent & potential during camps & trial periods
 Initial exposure to high performance training environments
- 1 DEMONSTRATION OF POTENTIAL
- Initial demonstration of talent & potential for high performance
 Expression of interest to enter into the high-performance pathway
- FOUNDATION
 SPORT SPECIFIC COMMITMENT
 AND/OR COMPETITION
- Commitment to discipline specific training & skill development
 Formal involvement in competition
- FOUNDATION
 EXTENSION AND REFINEMENT
 OF MOVEMENT
- Initial introduction to canoe sports
 Recreational involvement in canoe sports
- FOUNDATION
 LEARNING AND ACQUISITION
 OF BASIC MOVEMENT
- Acquisition of fundamental movement skills & water safety skills
- Informal, playful learning environment



Paddle Australia endorses the use of the FTEM model for a description of the pathways framework for developing athletes in paddling. This document is an explanation of the National Athlete Pathway Framework for Canoe Sprint. It has been developed to provide a unified model of development that can be used by the stakeholders to classify and direct athletes as they progress through our sport from foundations to elite levels.

4. PA ATHLETE PATHWAY OVERVIEW

NON-ELITE

FOUNDATION 1: BASIC MOVEMENT FOUNDATIONS





PRIMARY AIMS

Learning and/or relearning and acquiring the basic motor movement patterns common to most sports including kayaking and canoeing

	PHASE DETAILS F1
Development Focus	The focus at this stage is to engage the individual and make it fun and enjoyable. The athlete should be developing the skills that can apply across a multitude of sports and concentrate on gross motor skills including movement patterns, balance in a variety of positions, strength (particularly core strength and upper body strength) and rhythm.
Typical Training Environment	It is expected that this will be a relaxed structure of play at home, at early childhood centers and/or school environments
Technical Development	It is expected that a well-rounded child at this stage should be able to move at a variety of speeds, move with rhythm, balance in a variety of environments and can hold posture and bear their own weight on arms including tumbling movements. It is also expected that athletes should have a feel for the water and pulling themselves through the water. For this reason, a swimming background would also be important. It is recommended that athletes at this level also incorporate swimming into their development as it gives variety to play and allows the athlete to develop a "feel" for the water. It also is important in Australia that all children know how to swim.
Typical Sessions per Week	One to two sessions per week. Ideally, sessions should be short (about 15-20 minutes) sessions should be fun.

F1 LED BY

It is expected that the NSOs will lead the development of the curriculum, and the State Member Associations (SMA) will work with state and privately based educational institutions and other clubs and groups to implement meaningful play situations that allow children to develop their movement potential. Thus, driving a program that will encourage active lifestyles and improved use of the body.



2 Advancing and refining the developed movement patterns into canoe/kayak related

PHASE DETAILS F2		
Development Focus	Advancing the ability to paddle and enjoyment of the activities involved. Increased knowledge of opportunities in paddling from recreation and elite and the types of paddling available.	
Daily Training Environment	Instructors should be accredited Paddle OZ instructor or accredited coaches. The environment should be safe flat or moving water with all precautions taken to protect the athletes.	
Technical Development	Attainment of Paddle OZ – Discovery program competencies. paddleoz.paddle.org.au	
Typical Sessions per Week	One to two sessions per week of approximately 30min - 1 hour is recommended. It is important that the athlete wants to return to see what else can be experienced.	

F2 LED BY

It is expected that the NSOs will lead the development of the curriculum, and the State Member Associations (SMA) will work with state and privately based educational institutions and other clubs and groups to implement. PA's Paddle OZ – Discovery Program would be considered the main drivers in this phase. An eagerness to extend the athletes competencies and their involvement in paddling. Gymnastics and Swimming programs will continue to help drive the athlete forward.



Advancing and refining the developed movement patterns into canoe/kayak related environments.

	PHASE DETAILS F3
Development Focus	The aim at this level is to improve technical aspects of paddling and develop a more competent level of ability while enjoying the paddling.
Daily Training Environment	It is expected that the athlete will have joined a local paddling club and be receiving some regular coaching. Sessions could be formal or informal.
Technical Development	The athlete will be starting to understand and apply some of the concepts of posture, catch, pull, exit and separation. Should be introduced to crew boats.
Typical Sessions per Week	It is expected that the athlete will have between 2 and 3 sessions per week of approximately 1 hour per session is recommended. There should a gradual increase and progression in the training load and intensity to avoid injury and illness. Athletes must have adequate recovery.
Coaching Level	The coach of these athletes should be an accredited coach.
Targeted Competitions	Athletes at this level can be expected to be competing in state, club and school-based competitions of any type.
Other Considerations	Athletes are encouraged to try as many different paddle disciplines as practicable. It should be noted, however, that age and size restrictions will apply to each of the disciplines independently.

F3 LED BY

It is expected that the NSOs will lead the development of the curriculum, and the State Member Associations (SMA) will work with active clubs in providing training and competition opportunities for participants at all levels and can provide an appropriate level of support for the beginning athlete. State Member Associations will often have age and ability specific competitions available in numerous disciplines.



Effectively identified as a potential high-performance athlete in canoe/kayak.

Phase Details T1

Development Focus	Athletes should be directed to correct technique and any learned behavior should be consistent with PA accepted and encouraged technical models.
Daily Training Environment	Clubs and State Development Squads are in a position to provide the best daily training environment. Obviously, athletes should have access to craft and equipment that are of reasonably high quality (they do not require top quality craft). Athletes should also be looking at having access to their own (rather than shared) equipment. At the least, athletes should have their own paddles chosen in consultation with their coach.
Technical Development	Athletes abilities should be improving and moving towards the recognised technical model. Ability to move the craft is improving, developing a good stroke pattern (catch and exit) and improvement of leg drive and body rotation.
Typical Sessions per Week	Typically, athletes should be training 3 – 5 sessions per week. These sessions should be programed and demonstrate structure based on recognised interval training protocols. They should be balanced between technique, strength, endurance and speed work, as well as building athlete's general fitness. There should be a gradual increase and progression in the training load and intensity to avoid injury and illness. Athletes must have adequate recovery.
Coaching Level	While it may not be a necessity, it is expected that the coaches of athletes in this stage are recognised accredited coach. These coaches have the knowledge and ability to direct the athlete in correct techniques and develop individualised and balanced training programs that progress the athlete seamlessly.
Targeted Competitions	Athletes should be focused on Club and State based competitions which are commensurate with their abilities. Regular competition is encouraged to provide athletes with competition practice. Results are mostly irrelevant except for the rate of change in improvement.
Other Considerations	Athletes are beginning to show greater interest, but it is expected that athletes maintain an interest in other disciplines and even other sports. It is vital that athletes continue to enjoy their training and completion experiences.

Physical and Performance Characteristics T1

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Athletes Kayak times produced in r	neutral conditions – calculated using 84% progr	nostic of worlds best senior time
K1 200m time	Male < 40.17sec	Female < 45.94sec
K1 500m time	Male < 1:53.74	Female < 2:07.44
K1 1000m time	Male < 4:02.87	
Athletes Canoe times produced in r	neutral conditions – calculated using 84% progr	nostic of worlds best senior time
C1 200m time		Female < 54.02
C1 1000m time	Male < 4:26.86	
	20m Multi Stage Shuttle Run – Beep test	
Beep test Male > level 10 Female > level 8		Female > level 8
	Strength Testing	
Prone hold (plank)	Male > 45 sec	Female > 45 sec
Chin Ups (continuous to exhaustion)	Male > 10	Female > 7
Push Ups in 1min	Male > 30	Female > 20
Bench Pull (1min 50% of BW)	Male > 30	Female > 20

Sports Specific Skills T1

Athletes have:

- The beginnings of a "natural" stroke;
- Begin to be able control their body while balancing the boat;
- An upright posture;
- The ability to swing the body in rhythm with the stroke;
- The ability to drive with both legs evenly;
- Basic control of the catch and reach for it;
- The strength and technique to maintain power through the stroke;
- Control over the exit of the blade;
- A distinct separation between strokes;
- An ability to paddle in a team boat and keep stroke in time;
- The control to switch between stroke rates;

Practice and Competitive Investment T1

Has well rounded sport background (e.g. played at least 3 other sports at some time). Has reached or is reaching competitive levels in other sports and has recognised team skills such as sportsmanship, sharing, loyalty, modesty, humility.

Psychological Skills and Attributes T1

- Mental toughness others recognise a mental toughness in this athlete.
- Anxiety/arousal control Largely show little signs of anxiety and can use anxiety as a tool to do better, occasionally.
- Self-belief Show evidences of a belief that they can achieve most things if they set their mind to it and is mostly committed whole heartedly to the goals at hand in anything, they set out to do.

Personal Excellence Qualities and Skills T1

- Has a good balance of sport and life.
- Is happy in themselves.
- Has the ability to organise themselves in their day to day activities self-regulation.
- Consistently receives good results in effort on school report cards regardless of subject.

T1 LED BY

• State Development Squad (SDS)



Effective confirmation of high-performance athlete in canoe/kayak.

Phase Details T2

Development Focus	Athletes should be directed to correct technique and any learned behavior should be consistent with PA's accepted and encouraged technical models. Stroke and other corrections should be more targeted and should become part of the athletes' daily instruction. Athletes should also be targeting more specific strength and conditioning aspects in their training and working on weaknesses.
Daily Training Environment	State Development Squads are in a position to provide the best daily training environment. Athletes should have access to craft and equipment that are of a reasonable standard and competitive. It is expected that athletes at this level should have their own craft and equipment or have access to craft and equipment that they can exclusively use.
Technical Development	Athletes' technical abilities should be ingrained. While it may not be "perfect" the paddlers technique should display a large degree of excellent paddle techniques. Key areas are posture in the craft, the catch, the stroke and the exit. Use of leg drive and body rotation are continually developing. The ability to transmit power to the boat using these techniques is fundamental to the athletes' progression.
Typical Sessions per Week	Typically, athletes should be training 6-10 sessions per week. These sessions should be programed and demonstrate structure based on recognised interval training protocols. They should include a minimum of 2 strength and conditioning sessions targeted at the athletes' weaknesses. Sessions should continue to be balanced between technique, strength, endurance and speed work, as well as building athlete's general fitness. There should a gradual increase and progression in the training load and intensity to avoid injury and illness. Athletes must have adequate recovery.
Coaching Level	It is expected that the coaches of athletes in this stage are recognised accredited coaches. These coaches have the knowledge and ability to direct the athlete in correct techniques and develop individualised and balanced training programs that progress the athlete seamlessly.
Targeted Competitions	Athletes should be focused on Club, State and National competitions which are commensurate with their abilities. Regular competition is encouraged to provide athletes with competition practice. Results in the national based competitions should place the athlete at or around the top 10% of athletes in their class.
Other Considerations	Athletes should be specialising in disciplines, but it is expected that athletes maintain an interest in other disciplines and even other sports. Caution must be exercised, however, with respect to injury and interference of other sporting endeavors with the workload required of an athlete at this level. It is vital that athletes continue to enjoy their training and completion experiences.

Physical and Performance Characteristics T2

Athletes Kayak times produced	n neutral conditions – calculated using 87% progr	nostic of worlds best senior time
K1 200m time	Male < 38.78 sec	Female < 44.36 sec
K1 500m time	Male < 1:49.82	Female < 2:03.04
K1 1000m time	Male < 3:54.49	
Athletes Canoe times produced	n neutral conditions – calculated using 87% progr	nostic of worlds best senior time
C1 200m time		Female < 52.15
C1 1000m time	Male < 4:17.66	
	20m Multi Stage Shuttle Run – Beep test	
Beep test Male > level 11 Female > level 9		Female > level 9
	Strength Testing	
Prone hold (plank)	Male > 60 sec	Female > 60 sec
Chin Ups (continuous to exhaustion)	Male > 15	Female > 10
Push Ups in 1min	Male > 40	Female > 25
Bench Pull (1min 50% of BW)	Male > 35	Female > 25

Sports Specific Skills T2

Athletes have:

- The beginnings of a "natural" stroke;
- To be able control their body while balancing the boat;
- An upright posture;
- The ability to swing the body in rhythm with the stroke;
- The ability to drive with both legs evenly and with strength;
- Good control of the catch and reach for it;
- The strength and technique to maintain power through the stroke;
- · Control over the exit of the blade;
- A distinct separation between strokes;
- An ability to paddle in a team boat and contribute to the power of the boat effectively;
- The control to switch between stroke rates efficiently and accurately;

Practice and Competitive Investment T2

Has well rounded sport background (e.g. played at least 3 other sports at some time). Has reached or is reaching competitive (representative) levels in canoe kayak other sports and has recognised team skills such as sportsmanship, sharing, loyalty, modesty, humility.

Psychological Skills and Attributes T2

- Mental toughness others recognise a mental toughness in this athlete
- Anxiety/arousal control Largely show little signs of anxiety and can use anxiety as a tool to do better, occasionally
- Self-belief Show evidences of a belief that they can achieve most things if they set their mind to it and is mostly committed whole heartedly to the
 goals at hand in anything, they set out to do.
- This individual has a mindset which knows they will get better Commitment.

Personal Excellence Qualities and Skills T2

- Has a good balance of sport and life
- Is happy in themselves and knows where they are heading
- · Has the ability to organise themselves in their day to day activities to maximise use of time
- Consistently receives good results in effort on school report cards regardless of subject

T2 LED BY

- PA Performance Pathways
- PA National and State coaches
- State Development Squads (SDS)
- Possibly SIS/SAS support
- Possibly National Development Squads (NDS)



PI

PRIMARY AIMS

Effective development of high-performance pre-elite athlete in canoe/kayak.

Phase Details T3

Development Focus	Athletes should by now have consistent and excellent paddling technique with only minor problems that are known and being worked on. Athletes' preparation will be on building power, speed and endurance and at determining their preferred distance and team boat expertise. They will be developing fitness, power and endurance commensurate with their age and the pre-elite status
Typical age range	As a guide, the age range for these athletes is 17+ years.
Daily Training Environment	SIS/SAS programs provide the best daily training environment. Athletes should have access to craft and equipment that are of a high standard and competitive. It is expected that athletes at this level should have their own craft and equipment or have access to craft and equipment that they can exclusively use. They should be seen as role models and display those characteristics.
Technical Development	Athletes' technical abilities should be ingrained. While it may not be "perfect" the paddler's technique should display an extensive degree of excellent paddle techniques. Key areas are posture in the boat, the catch, the stroke and the exit. Use of leg drive and body rotation are developing. The ability to transmit power to the boat using these techniques is fundamental to the athletes' progression as the "feel" of the paddler as to what they are doing in the craft. They should be able to provide feedback on how they went in a session and have a good understanding of their own body.
Typical Sessions per Week	Typically, athletes should be training 7-12 sessions per week at appropriate loads to support progression. These sessions should be programed and demonstrate structure based on recognised interval training protocols. They should include 2-3 strength and conditioning sessions targeted at the athlete's weaknesses and their progression to the next step. Sessions should continue to be balanced between technique, strength, endurance and speed work, as well as building athlete's general fitness. There should a gradual increase and progression in the training load and intensity to avoid injury and illness. Athletes must have adequate recovery.
Coaching Level	It is expected that the coaches of athletes in this stage are recognised accredited coaches ideally SIS/SAS coaches. These coaches have the knowledge and ability to direct the athlete in correct techniques and develop individualised and balanced training programs that progress the athlete seamlessly through this progression.
Targeted Competitions	Athletes should be focused on National competitions. These races should provide the means to team selection and the athlete should expect to finish on the podium in most of those events entered. Regular competition is encouraged to provide athletes with competition practice and they should support their state championships. Results in the national based competitions should place the athlete at or around the top 5% of athletes in their class.
Other Considerations	Athletes will be specialising in specific distances and should know where they are in relation to team boats. Workload should be considered carefully and the athletes' well-being is paramount. The athlete should be aware of any injuries or niggles and be completely familiar with treatment and when to rest. It is vital that athletes continue to enjoy their training and competition experiences.

Physical and Performance Characteristics T3

Athletes Kayak times produced i	n neutral conditions – calculated using 90% pro	gnostic of worlds best senior time
K1 200m time	Male < 37.49 sec	Female < 42.88 sec
K1 500m time	Male < 1:46.16	Female < 1:58.94
K1 1000m time	Male < 3:46.67	
Athletes Canoe times produced	n neutral conditions – calculated using 90% pro	ognostic of worlds best senior time
C1 200m time		Female < 50.42
C1 1000m time	Male < 4:09.07	
	20m Multi Stage Shuttle Run – Beep test	
Beep test	Male > level 12	Female > level 10
	Strength Testing	
Prone hold (Plank)	Male > 90sec	Female > 90 sec
Chin Ups (continuous to	Male > 20	Female > 12
exhaustion)		
Push Ups in 1min	Male > 50	Female > 30
Bench Pull (1min 50% of BW)	Male > 40	Female > 30

Sports Specific Skills T3

Athletes have:

- Developed a "natural" stroke;
- To be able control their body while balancing the boat;
- An upright posture;
- The ability to swing the body in rhythm with the stroke;
- The ability to drive with both legs evenly and with strength. Good control of the catch and reach for it;
- The strength and technique to maintain power through the stroke;
- Control over the exit of the blade;
- A distinct separation between strokes;
- An ability to paddle in a team boat and contribute to the power of the boat effectively;
- The control to switch between stroke rates efficiently and accurately;

Practice and Competitive Investment T3

Has reached or is reaching competitive (representative) levels in canoe kayak other sports and has recognised team skills such as sportsmanship, sharing, loyalty, modesty, humility.

Psychological Skills and Attributes T3

- Mental toughness others recognise a mental toughness in this athlete.
- Anxiety/arousal control Largely show little signs of anxiety and can use anxiety as a tool to do better, occasionally.
- Self-belief Show evidences of a belief that they can achieve most things if they set their mind to it and is mostly committed whole heartedly to the goals at hand in anything, they set out to do.
- Commitment This individual has a mindset which knows they will get better Commitment.

Personal Excellence Qualities and Skills T3

- Has a good balance of sport and life.
- Is happy in themselves and knows where they are heading.
- Has the ability to organise themselves in their day to day activities to maximise use of time.
- Consistently receives excellent feedback regarding their dedication to tasks at hand whether at school, university or work.
- Athlete has a knowledge of where he/she is progressing after elite representation is completed.

T3 LED BY

- PA Performance Pathways
- SIS/SAS coaches
- PA National and State coaches
- Possibly SIS/SAS support
- National Development Squad (NDS)



Enhanced athlete support to attain elite national representation in canoe/kayak.

Phase Details T4

Development Focus	Athletes should by now have consistent and excellent paddling technique with only minor problems that are known and are being worked on. Athletes' preparation will be on building power, speed and endurance and at determining their preferred distance and team boat expertise. They will be developing fitness, power and endurance commensurate with their age and the pre-elite status.
Typical age range	As a guide, the age range for these athletes is 19+ years.
Daily Training Environment	SIS/SAS programs provide the best daily training environment. However, these athletes should be monitored by NCE coaches and national coaches at least at U23 level. Athletes should have access to craft and equipment that are of a high standard and competitive. It is expected that athletes at this level should have their own craft and equipment or have access to craft and equipment that they can exclusively use. They should be seen as role models and display those characteristics at all times.
Technical Development	Athletes' technical abilities should be ingrained. While it may not be "perfect" the paddler's technique should display an extensive degree of excellent paddle dynamics. Key areas are posture in the boat, the catch, the stroke and the exit. Use of leg drive and body rotation are developing. The ability to transmit power to the boat using these techniques is fundamental to the athletes' progression as the "feel" of the paddler as to what they are doing in the boat. They should be able to provide feedback on how they went in a session and have a good understanding of their own body. Their technical knowledge of what and why they are doing skills should be mastered and they should understand every aspect of a training regime.
Typical Sessions per Week	Typically, athletes should be training 10-15 sessions per week. These sessions should be programed and demonstrate structure based on recognised interval training protocols. They should include 3-4 strength and conditioning sessions targeted at the athlete's weaknesses and their progression to the next step. Sessions should continue to be balanced between technique, strength, endurance and speed work, as well as building athlete's general fitness in line with the athlete profile expectations as outlined below. There should a gradual increase and progression in the training load and intensity to avoid injury and illness. Athletes must have adequate recovery.
Coaching Level	It is expected that the coaches of athletes in this phase are recognised High Performance level coaches. These coaches have the knowledge and ability to direct the athlete in correct techniques, the consistent and scientific understanding of where the athlete is and where he/she is progressing. The coach can develop individualised and balanced training programs that progress the athlete seamlessly through this progression.
Targeted Competitions	Athletes should be focused on national competitions. These races should provide the means to team selection and the athlete should expect to finish on the podium in most of those events entered. Athletes should be finishing regularly in the A Finals and occasionally on the podium at Junior Worlds or U23 Championships. Regular competition is encouraged to provide athletes with competition practice and they should support their state championships. Results in the national based competitions should place the athlete at or around the top 3% of athletes in their class and the top 10% of athletes in their class internationally.
Other Considerations	Athletes will be specialising in specific distances and should know where they are in relation to team boats. Workload should be considered carefully and the athletes' well-being is paramount. The athlete should be aware of any injuries or niggles and be completely familiar with treatment and when to rest. It is vital that athletes continue to enjoy their training and competition experiences.

As a guide Athletes entering the T4 phase will be expected to be demonstrating the majority of the discipline-specific characteristics below.

Physical and Performance Characteristics T4

Athletes Kayak times produ	ced in neutral conditions – calculated using 93% progn	ostic of worlds best senior time
K1 200m time	Male < 36.28 sec	Female < 41.50 sec
K1 500m time	Male < 1:42.74	Female < 1:55.10
K1 1000m time	Male < 3:39.36	
Athletes Canoe times produ	ced in neutral conditions – calculated using 93% progn	ostic of worlds best senior time
C1 200m time		Female < 48.79
C1 1000m time	Male < 4:01.04	
	Specific Canoe/Kayak Ergo Lab Test	
V02 max (ml/kg/min)	Male > 58	Female > 48
	Strength Testing	
Side plank (each side)	Male > 45sec	Female > 45 sec
Chin Ups (3 rep max)	Male > 120% of body weight (BW)	Female > 110% of body weight (BW)
	(total weight includes BW)	(total weight includes BW)
ench Press (3 rep max)	Male > 100% of BW	Female > 80% of BW
Bench Pull (3 rep max)	Male > 100% of BW	Female > 90% of BW
Dead Lift (3 rep max) *	Male > 130% of BW	Female > 120% of BW

^{* 3} RM only performed once technique approved by qualified ASAC (or equivalent) Strength and conditioning coach.

Sports Specific Skills T4

Athletes have:

- Developed a powerful and "natural" stroke;
- To be able control their body while balancing the boat;
- An upright posture;
- The ability to swing the body in rhythm with the stroke, achieving maximum rotation while applying targeted amounts of power and speed to the stroke
 as necessary:
- The ability to drive with both legs evenly and with strength;
- Excellent control of the catch and reach for it;
- The strength and technique to maintain power through the stroke and be able to switch up and down as necessary;
- Excellent control over the exit of the blade;
- An ability to paddle in a team boat and contribute to the power of the boat effectively, efficiently and extensively;
- The control to switch between stroke rates efficiently and accurately while maintaining correct technique and power;

Practice and Competitive Investment T4

Has reached competitive (representative) levels in canoe kayak and has achieved strong results, has recognised team skills such as sportsmanship, sharing, loyalty, modesty, humility.

Psychological Skills and Attributes T4

- Mental toughness Always shows mental toughness in competition and training;
- Anxiety/arousal control Show little signs of anxiety and can use anxiety as a tool arousal;
- Self-belief Show evidences of a belief that they can achieve most things if they set their mind to it and is mostly committed whole heartedly to the goals at hand in anything, they set out to do;
- Commitment This individual is committed whole heartedly to the goals at hand in anything they set out to do;

Personal Excellence Qualities and Skills T4

- Has an excellent balance of sport and life;
- Is happy in themselves and knows where they are heading;
- Has the ability to organize themselves in their day to day activities to maximise use of time;
- Consistently receives excellent feedback regarding their dedication to tasks at hand whether at school, university or work;
- Athlete has a clear knowledge of where he/she is progressing after elite representation is completed;

T4 LED BY

- NCE in collaboration with SIS/SAS
- SIS/SAS coaches in collaboration with NCE High Performance coaches
- PA National and state coaches
- SIS/SAS



Representation of the athlete in the highest level of paddling.

Phase Details E1

Development Focus	Paddling technique at this level should only show minor personal variations from the ideal. Effort must continue to improve technique. However, other factors of strength, endurance and speed will continue to be enhanced. The athlete's physical and mental characteristics will continue to be measured and techniques adopted to gain incremental increases in performance.
Typical age range	The typical age range for athletes entering E1 will vary, however, the typical age range would be between 18 and 30 years of age.
Daily Training Environment	It is expected that this athlete will be integrated into the NCE. The program will be of exceptional quality and monitoring of progressing will be ongoing by professional High-Performance staff of Paddle Australia and the AIS through Athlete Management System (AMS)
Technical Development	Technical ability will never be perfect so continual improvement is expected no matter how minor corrections may be. The athlete is responsible for heeding advice from PA and AIS staff and should be fully focused goals at a biomechanical and skills acquisition appropriate level.
Typical Sessions per Week	Typically, it is expected that sessions will be tailored for the individual needs of the athletes. Minimal number of sessions might be 7 on water sessions and 3 others for strength and conditioning or other aerobic work. It is expected that maximum sessions might be around 15 total sessions a week.
Coaching Level	NCE coaches will be responsible for E1 athletes although responsibility for daily training might be passed to assistant coaches with continued close monitoring by the Head Coach.
Targeted Competitions	Athletes should be focused on national competitions, namely GP1 & GP2 as well as National Championships. These races should provide the means to team selection and the athlete should expect to finish on the podium in most of those events entered. Consequently, upon selection, the second half of the year should be focused on international competitions such as World Cups World Championships and/or Olympic (Paralympic) Games.
Other Considerations	By now athletes will have determined their paddling disciplines some will be specialist team boat paddlers others will be specialist distance or sprint paddlers and others may be able to adapt and be competitive in several areas. Coaches will be continually observing and monitoring E1 athletes' and will discuss different options for the athlete's progress toward podium finishes.

Physical and Performance Characteristics E1

Athletes Kayak times produ	ced in neutral conditions – calculated using 95% progn	ostic of worlds best senior time
K1 200m time	Male < 35.52 sec	Female < 40.62 sec
K1 500m time	Male < 1:40.57	Female < 1:52.68
K1 1000m time	Male < 3:34.75	
Athletes Canoe times produ	ced in neutral conditions – calculated using 95% progn	ostic of worlds best senior time
C1 200m time		Female < 47.76
C1 1000m time	Male < 3:55.96	
	Specific Canoe/Kayak Ergo Lab Test	
V02 max (ml/kg/min)	Male > 61	Female > 51
	Strength Testing	
Side plank (each side)	Male > 60sec	Female > 60 sec
Chin Ups (3 rep max)	Male > 130% of body weight (BW)	Female > 120% of body weight (BW)
	(total weight includes BW)	(total weight includes BW)
Bench Press (3 rep max)	Male > 110% of BW	Female > 90% of BW
Bench Pull (3 rep max)	Male > 110% of BW	Female > 100% of BW
Dead Lift (3 rep max) *	Male > 140% of BW	Female > 130% of BW

^{* 3} RM only performed once technique approved by qualified ASAC (or equivalent) Strength and conditioning coach.

Sports Specific Skills E1

Athletes have:

- Developed a powerful and "natural" stroke;
- To be able control their body while balancing the boat;
- An upright posture;
- The ability to swing the body in rhythm with the stroke, achieving maximum rotation while applying targeted amounts of power and speed to the stroke
 as necessary;
- The ability to drive with both legs evenly and with strength;
- Excellent control of the catch and reach for it;
- The strength and technique to maintain power through the stroke and be able to switch up and down as necessary to specific levels;
- Excellent control over the exit of the blade;
- A distinct separation between strokes without a deliberate emphasis;
- An ability to paddle in a team boat in any seat and contribute to the power of the boat effectively, efficiently and extensively;
- The control to switch between stroke rates efficiently and accurately while maintaining correct technique and power;

Practice and Competitive Investment E1

Has reached competitive (representative) levels in canoe kayak and has achieved strong results, has recognised team skills such as sportsmanship, sharing, loyalty, modesty, humility.

Psychological Skills and Attributes E1

- Mental toughness Always shows mental toughness in competition and training;
- Anxiety/arousal control Show little signs of anxiety and can use anxiety as a tool arousal;
- Self-belief Show evidences of a belief that they can achieve most things if they set their mind to it and is mostly committed whole heartedly to the goals at hand in anything they set out to do;
- Growth mindset -This individual has a mindset which knows they will continue to get better and can be competitive on any given day;
- Commitment This individual is committed whole heartedly to the goals at hand in anything they set out to do;

Personal Excellence Qualities and Skills E1

- Has an excellent balance of sport and life;
- Is happy in themselves and knows where they are heading;
- Has the ability to organize themselves in their day to day activities to maximise use of time;
- Consistently receives excellent feedback regarding their dedication to tasks at hand whether at school, university or work;
- Athlete has a clear knowledge of where he/she is progressing after elite representation is completed and is well on the way to meeting those non-sport specific goals;

E1 LED BY

- Permanent contact with the NCE training environments and PA's High-Performance Staff
- NCE High Performance coaches
- SIS/SAS Coaches



2

PRIMARY AIMS

Medal performance by the athlete in the highest level of paddling.

Phase Details E2

Development Focus	Paddling technique at this level should only show minor personal variations from the ideal. Effort must continue to improve technique. However, other factors of strength, endurance and speed will continue to be enhanced. The athletes physical and mental characteristics will continue to be measured and techniques adopted to gain incremental increases in performance. Athletes are continually looking for that small gain that will move them up the podium or help make them a repeat podium athlete.
Typical age range	The typical age range for athletes entering E2 will vary, however, the typical age range would be between 18 and 30 years of age. (but may be a little older)
Daily Training Environment	It is expected that this athlete will be integrated fully into an NCE. Their program will be of exceptional quality and monitoring of progressing will be ongoing by professional High-Performance staff of Paddle Australia. These services will be provided by skilled and recognised coaches, sports scientists and sports medicine personnel.
Technical Development	Technical ability will never be perfect so continual improvement is expected no matter how minor corrections may be. The athlete is responsible for heeding advice from PA and AIS staff and should be fully focused on the goals at hand.
Typical Sessions per Week	Typically, it is expected that sessions will be tailored for the individual needs of the athletes. Minimal number of sessions might be 7 on water sessions and 3 others for strength and conditioning or other aerobic work. It is expected that maximum sessions might be around 15 total sessions a week.
Coaching Level	NCE coaches will be responsible for E2 athletes although responsibility for daily training might be passed to assistant coaches with continued close monitoring by the Head Coach.
Targeted Competitions	Athletes should be focused on national competitions, namely GP1 & GP2 as well as National Championships. These races should provide the means to team selection and the athlete should expect to finish on the podium in most of those events entered. Consequently, upon selection, the second half of the year should be focused on international competitions such as World Championships and/or Olympic Games.
Other Considerations	By now athletes will have determined their paddling disciplines some will be specialist team boat paddlers others will be specialist sprint or distance paddlers and others may be able to adapt and be competitive in several areas. Coaches will be continually observing and monitoring E2 athletes' and will discuss different options for the athlete's progress toward continued podium finishes and perhaps further opportunities in other combinations.

Physical and Performance Characteristics E2

Athletes Kayak times produ	ced in neutral conditions – calculated using 97% progn	ostic of worlds best senior time
K1 200m time	Male < 34.79 sec	Female < 39.78 sec
K1 500m time	Male < 1:38.50	Female < 1:50.36
K1 1000m time	Male < 3:30.32	
Athletes Canoe times produ	ced in neutral conditions – calculated using 97% progn	ostic of worlds best senior time
C1 200m time		Female < 46.78
C1 1000m time	Male < 3:51.10	
	Specific Canoe/Kayak Ergo Lab Test	
V02 max (ml/kg/min)	Male > 64	Female > 54
	Strength Testing	
Side plank (each side)	Male > 75sec	Female > 75 sec
Chin Ups (3 rep max)	Male > 140% of body weight (BW)	Female > 130% of body weight (BW)
	(total weight includes BW)	(total weight includes BW)
ench Press (3 rep max)	Male > 120% of BW	Female > 100% of BW
Bench Pull (3 rep max)	Male > 120% of BW	Female > 110% of BW
Dead Lift (3 rep max) *	Male > 150% of BW	Female > 140% of BW

^{* 3} RM only performed once technique approved by qualified ASAC (or equivalent) Strength and conditioning coach.

Sports Specific Skills E2

Athletes have:

- Developed a powerful and "natural" stroke which is continuing to improve;
- To be able control their body while balancing the boat;
- An upright posture that allows maximal pressure on the blade at the correct time and angle;
- The ability to swing the body in rhythm with the stroke, achieving maximum rotation while applying targeted amounts of power and speed to the stroke
 as necessary;
- The ability to drive with both legs evenly and with strength;
- Excellent control of the catch and reach for it;
- The strength and technique to maintain power through the stroke and be able to switch up and down as necessary to specific levels;
- Excellent control over the exit of the blade;
- A distinct separation between strokes without a deliberate emphasis;
- An ability to paddle in a team boat in any seat and contribute to the power of the boat effectively, efficiently and extensively;
- The control to switch between stroke rates efficiently and accurately while maintaining correct technique and power;

Practice and Competitive Investment E2

Has medalled at international events and is continuing to improve and press towards paddling mastery, has recognised team skills such as sportsmanship, sharing, loyalty, modesty, humility.

Psychological Skills and Attributes E2

- Mental toughness Always shows mental toughness in competition and training;
- Anxiety/arousal control Show little signs of anxiety and can use anxiety as a tool arousal;
- Self-belief Show evidences of a belief that they can achieve most things if they set their mind to it and is mostly committed whole heartedly to the goals at hand in anything they set out to do;
- Growth mindset -This individual has a mindset which knows they will continue to get better and can be competitive on any given day;
- · Commitment This individual is committed whole heartedly to the goals at hand in anything they set out to do;

Personal Excellence Qualities and Skills E2

- Has an excellent balance of sport and life;
- Is happy in themselves and knows where they are heading;
- Has the ability to organize themselves in their day to day activities to maximise use of time;
- Consistently receives excellent feedback regarding their dedication to tasks at hand whether at school, university or work;
- Athlete has a clear knowledge of where he/she is progressing after elite representation is completed and is well on the way to meeting those non-sport specific goals;

E2 LED BY

- Permanent contact with NCE Training environment and PA's High-Performance Staff
- NCE Performance coaches



Medal performance by the athlete in the highest level of paddling.

Phase Details M1

Development Focus	Paddling technique at this level should only show minor personal variations from the ideal. Effort must continue to improve technique. However, other factors of strength, endurance and speed will continue to be maintained or enhanced. The athletes physical and mental characteristics will have continued to be measured and techniques adopted to gain incremental increases in performance where applicable. Athletes are continually looking for that small gain that will move them up the podium or help make them a repeat podium athlete.
Typical age range	The typical age range for athletes entering M1 will vary, however, the typical age range would be between 25 and 30 years of age. (but can possibly be earlier or later)
Daily Training Environment	It is expected that this athlete will be integrated fully into an NCE. Their program will be of exceptional quality and monitoring of progressing will be ongoing by professional staff of Australian Canoeing and the AIS. These services will be provided by skilled and recognised coaches, sports scientists and sports medicine personnel
Technical Development	Technical ability will never be perfect so continual improvement is expected no matter how minor corrections may be. The athlete is responsible for heeding advice from PA High Performance staff and should be fully focused on the goals at hand.
Typical Sessions per Week	Typically, it is expected that sessions will be tailored for the individual needs of the athletes. Minimal number of sessions might be 7 on water sessions and 3 others for strength and conditioning or other aerobic work. It is expected that maximum sessions might be around 15 total sessions a week.
Coaching Level	NCE coaches will be responsible for M1 athletes although responsibility for daily training might be passed to assistant coaches with continued close monitoring by the Head Coach.
Targeted Competitions	Athletes should be focused on national competitions, namely GP1 & GP2 as well as National Championships. These races should provide the means to team selection and the athlete should expect to finish on the podium in most of those events entered. Consequently, upon selection, the second half of the year should be focused on international competitions such as World Championships and/or Olympic Games
Other Considerations	Athletes will have determined their paddling disciplines some will be specialist team boat paddlers others will be specialist sprint or distance paddlers and others may be able to adapt and be competitive in several areas. Coaches will be continually observing and monitoring M1 athletes' and will discuss different options for the athlete's progress toward continued podium finishes and perhaps further opportunities in other combinations with E1 and E2 athletes.

Physical and Performance Characteristics M1

Athletes Kayak times produc	ed in neutral conditions – calculated using 98.5% prog	nostic of worlds best senior time
K1 200m time	Male < 34.26 sec	Female < 39.18 sec
K1 500m time	Male < 1:37.00	Female < 1:48.68
K1 1000m time	Male < 3:27.11	
Athletes Canoe times produc	ed in neutral conditions – calculated using 98.5% prog	nostic of worlds best senior time
C1 200m time		Female < 46.07
C1 1000m time	Male < 3:47.58	
	Specific Canoe/Kayak Ergo Lab Test	
V02 max (ml/kg/min)	Male > 64	Female > 54
	Strength Testing	
Side plank (each side)	Male > 90 sec	Female > 90 sec
Chin Ups (3 rep max)	Male > 150% of body weight (BW)	Female > 140% of body weight (BW)
	(total weight includes BW)	(total weight includes BW)
Bench Press (3 rep max)	Male > 130% of BW	Female > 110% of BW
Bench Pull (3 rep max)	Male > 130% of BW	Female > 120% of BW
Dead Lift (3 rep max) *	Male > 170% of BW	Female > 150% of BW

Sports Specific Skills M1

Athletes have:

- Developed a powerful and "natural" stroke which is continuing to improve;
- To be able control their body while balancing the boat;
- An upright posture that allows maximal pressure on the blade at the correct time and angle;
- The ability to swing the body in rhythm with the stroke, achieving maximum rotation while applying targeted amounts of power and speed to the stroke as necessary:
- The ability to drive with both legs evenly and with strength;
- Excellent control of the catch and reach for it;
- The strength and technique to maintain power through the stroke and be able to switch up and down as necessary to specific levels;
- Excellent control over the exit of the blade;
- A distinct separation between strokes without a deliberate emphasis;
- An ability to paddle in a team boat in any seat and contribute to the power of the boat effectively, efficiently and extensively;
- · The control to switch between stroke rates efficiently and accurately while maintaining correct technique and power;
- Be the leader in a team boat and contribute to the power of the boat effectively, efficiently and extensively as necessary;
- · The control to switch between stroke rates efficiently and accurately while maintaining correct technique and power.

Practice and Competitive Investment M1

Has medalled at international events and is continuing to improve and press towards maintaining dominant position in the world, has recognised team skills such as sportsmanship, sharing, loyalty, modesty, humility.

Psychological Skills and Attributes M1

- Mental toughness Always shows mental toughness in competition and training;
- Anxiety/arousal control Show little signs of anxiety and can use anxiety as a tool arousal;
- Self-belief Show evidences of a belief that they can achieve most things if they set their mind to it and is mostly committed whole heartedly to the goals at hand in anything they set out to do;
- Growth mindset -This individual has a mindset which knows they will continue to get better and can be competitive on any given day;
- Commitment This individual is committed whole heartedly to the goals at hand in anything they set out to do;

Personal Excellence Qualities and Skills M1

- Has an excellent balance of sport and life;
- Is happy in themselves and knows where they are heading;
- Has the ability to organize themselves in their day to day activities to maximise use of time;
- Consistently receives excellent feedback regarding their dedication to tasks at hand whether at school, university or work;
- Athlete has a clear knowledge of where he/she is progressing after elite representation is completed and is well on the way to meeting those non-sport specific goals;

M1 LED BY

- Permanent contact with the NCE training environments and PA's High-Performance Staff
- NCE Performance coaches