

**Post Graduate Certificate in the Neuroscience of Leadership**

**Overview, Structure & Schedule**

**Table of Contents**

Program Overview .....	2
Audience.....	2
Program Fees .....	2
Faculty .....	2
How to Apply .....	3
Program Structure .....	3
Module Structure .....	3
Weekly Structure .....	4
Attendance Requirements .....	4
Homework & Assignment Summary.....	5
Final Assessment Process .....	5
Student Evaluation & Assessment .....	6
Grading of Final Assessments.....	6
Deferral Process.....	7
Masters Program .....	7
Intake Timetable .....	8
Syllabus Summary.....	9
Course Mission Statement.....	9
Module 1: Decision Making and Problem Solving.....	9
Module 2: Emotional Regulation.....	10
Module 3: Collaboration .....	11
Module 4 – Facilitating Change .....	12

# Post Graduate Certificate in the Neuroscience of Leadership

## Program Overview

The Post Graduate Certificate in the Neuroscience of Leadership (Masters Phase I) is the only program that awards a post graduate certificate in this field. The program is designed to offer the most innovative and rigorous postgraduate program on the application of neuroscience within leadership. The program is delivered virtually to meet the needs of working adults and consists of four modules including teleclasses, mentor sessions and small group working (pods). Each module has been designed to be a stimulating and self contained learning experience. Participants apply their learning of neuroscience in existing work, projects, and programs.

The coursework focuses on the topics of Decision Making & Problem Solving, Emotional Regulation, Collaboration, and Facilitating Change. It is led by our faculty of neuroscientists and includes guest lecturers who are experts in relevant neuroscience fields. The program provides a framework for you to bring that learning together as a coherent whole; to explore, and develop its explicit impact upon your practice. This process of consolidation and synthesis is, in itself, a learning experience and is part of the assessment for postgraduate credit.

## Audience

The program is focused on developing a better understanding of how the human brain functions at the individual, team, group, and systemic levels to fulfill the potential of each. Admission is open all experienced individuals who are prepared for a graduate level learning environment through either previous formal or work educational experience. Those interested will include change agents, learning professionals, educators and academics who want to understand the latest science of the brain and how it can improve human and organizational performance.

## Program Fees

A US\$500 application fee is payable at time of application submission, this is deducted from the program fees for applicants accepted into the program.

Students are able to register for the full program at US\$12,000 when enrolled and paid for upfront. Alternatively, students are able to pay a module at a time at US\$3,250 per module. Module payments are due 2 weeks prior to module commencement.

## Faculty

The program is led by our faculty of neuroscientists, for bios and info on faculty members visit [http://www.neuroleadership.org/resources/pgcnl\\_faculty.shtml](http://www.neuroleadership.org/resources/pgcnl_faculty.shtml). Mentors/Teaching Assistants will also support each student on the learning journey. Guest professors/lecturers will deepen the curriculum experience by sharing their area of expertise with program participants. This will allow students to learn from researchers with the latest findings from fields influencing NeuroLeadership.

# Post Graduate Certificate in the Neuroscience of Leadership

## How to Apply

A link to the application form can be found at <http://www.neuroleadership.org/resources/graduate-certificate>. The form is to be completed with a combination of work, education and professional qualifications along with personal statement and professional references. Applications will be sent to the enrollments panel once the completed application, support documentation and application fee are received. Students will be notified of via email once their application is processed.

## Program Structure

The PGCNL program is delivered virtually and is designed with flexibility in mind, with online course materials and weekly webinars. Two class lecture times are provided for each intake to accommodate time zones globally.

The program is conducted over twelve months and consists of four modules of 10 weeks each. There are 2 intakes each year in March and October. Learning is self paced and includes weekly live webinar sessions with a professor from the Institute's education faculty. Four week breaks are structured at the end of each module for assignments and study. Modules are built around the four domains of NeuroLeadership:

- Module 1: Decision making and problem solving
- Module 2: Emotional Regulation
- Module 3: Collaboration
- Module 4: Facilitating change

## Module Structure

While there is no pre-requisite coursework for the program the 4 modules must be taken successively. All students will begin with Module 1.

Each module of the 4 modules consists of:

- 10 weeks of lessons with 4 week breaks structured between modules
- 90 minute telecall/webinar each week with either the Lead Professor or a Guest Professor
- A pod call approximately every 2nd week with Assistant Trainer
- 300 word weekly reflection
- End of module 2000 word essay
- A half hour 1:1 session with the Lead Professor per student per module.

# Post Graduate Certificate in the Neuroscience of Leadership

## Weekly Structure

Students should plan for a 3-4 hour commitment each week throughout the program to complete the following activities:

- **Readings and resources**  
Weekly readings and resources are posted on the online portal. Materials include links, readings, audio recordings and slides. It is expected that time spent reading and completing the assignments each week will be two-three hours.
- **Telecall / Webinar**  
A 90 minute telecall, in conjunction with a webinar, is conducted each week throughout the 10 week module. These telecalls are run by the Lead Professor or invited Guest Professors. The webinar consists of a 60 minute presentation followed by 30 minute Q&A with students and the professor.
- **300 Word Reflection**  
Students are required to complete a 300 word reflection each week and submit to the online portal prior to the next week's webinar. These reflections assist in embedding the learnings and are important as reference for the end module and end program assignments.
- **Pod Calls**  
Pod calls are 60 minute learning pods (small groups) that are scheduled & facilitated by the Assistant Trainers. There are 4-5 pods per module that are held every other week during the 10 weeks of a module (eg these fall after weeks 2, 4, 6, 8 and 10)

## Attendance Requirements

A certain number of contact hours are necessary for a student to grasp the concepts and content enough to successfully complete the Post Grad Certificate.

No two brains are alike, so student participation and insights help the whole group's learning and development.

- **Weekly Telecalls**  
Students are required to attend 9 out of the 10 scheduled webinars each module, if you miss more than this your attendance will not be sufficient to complete the program. If more than one is missed alternative arrangements must be discussed with the Lead Professor. Note: There will not be make up calls for the program and telecall recordings are not available.
- **Pod Calls**  
Students are required to attend 5 pod calls each module. There are a selection of times available to students for Pod Calls so these can be structured around individual schedules.

# Post Graduate Certificate in the Neuroscience of Leadership

## Homework & Assignment Summary

- **Weekly reflection – 300 words**

Students are required to complete a 300 word reflection each week and submit to the online portal prior to the next week's webinar. These reflections assist in embedding the learnings and are important as reference for the end module and end program assignments. To receive the certificate of completion for the Post-Graduate Certificate all homework must be completed and submitted.

- **End Module Critical Commentary – 2000 words**

Students are required to submit a 2000 word essay at the end of each module. Assignment includes writing up a report on what they have learned from the module and how they will apply it in practice in their chosen area of focus. These 2,000 words essays are called critical commentaries.

- **End Program Final Reflection – 2000 words**

Students are required to submit a 2000 word final reflection at the end of the program. Students consider their learning from each module and write a critical reflection upon the learning and how this has, and will be, applied within their practice.

- **Final Assessment Submissions**

Students make two submissions to complete the postgraduate certificate:

- Learning Journey Document PDF4012
- Research report PDF4820

### **Learning Journey Document PDF4012**

Made up of the 5×2000 word essays above (the critical commentary for each module and the end program final reflection). These reflections are submitted as module PDF4012 and, if pass is achieved, students receive 40 credits.

### **Research report PDF4820 – 4000 words**

Students choose an area of learning or practice for which they would like to develop their learning further either through in-depth study or through applying in practice.

Students undertake a short work based project, or systematic inquiry to expand their understanding and knowledge in that area. A report of this project and an accompanying reflection (4000 words) upon it is submitted as module PDF4820 and, if pass is achieved, students receive 20 credits.

## Final Assessment Process

Submissions go through two assessment stages, involving three independent assessors, before undergoing a final evaluation by an Assessment Board. This staged assessment assures you a fair evaluation and gives you an opportunity to learn along the way.

The assessors (and your adviser) are all experienced individuals who are specifically trained and approved by Middlesex University. They submit their own portfolios to establish their credentials and undertake assessor training for professional learning in higher education.

# Post Graduate Certificate in the Neuroscience of Leadership

## Student Evaluation & Assessment

- **Student development measurement**

Students are assessed on progress via their weekly homework essay, end of the module essays, learning diary, class participation, pod participation and research project. Student development is measured by interactions between the ATs and professor with regard to performance on all the evaluation points listed above. Being such a new field of research, and considering the diversity of the student body, there is a wide range of individual learning curves for the course content, and each student is gauged on their own development from day 1, as opposed to where they stand in relation to other class members. We believe that this is the best way to aid the student through this personalized learning journey.

- **Specific outcomes students are measured against**

All students must demonstrate analysis and critical reflection which informs and influences practice within their field, policy and service provision, as well as demonstrate critical appraisal of relevant theoretical models within the neuroleadership field. Students are expected to be engaged within group discussions to demonstrate this analysis and critical reflection. This will all be reflected within the learning journey document and research project, as well as class participation, pod attendance and weekly homework essays.

- **Frequency and type of feedback given to the students**

Feedback will be in the form of a 1:1 teleconference held at the end of every module with each student. In addition, each student is expected to actively participate during every telecall, including submission of weekly essay, which will also serve as an opportunity for feedback from the professor or staff. Finally, small group pod calls are mandatory every 2 weeks, which serve to foster a more intimate group sharing of insights gained up to that point in the course. The ATs will be present at and moderate those sessions, with feedback being provided to the professor as to student interactions. The professor will then follow up where there may be any questions, issues or help needed on an individual basis.

## Grading of Final Assessments

Students who complete the requirements to the satisfaction of the PDF committee and professor will receive full credit and are awarded the 60 credit graduate certificate, so the structure would be pass/fail. There are no letter grades.

Credit hours are awarded from Middlesex University. The UK credits will be 60 hours. This is equivalent to 30 European and 15 US credit hours. Credits are awarded to students who successfully complete all requirements of the 12 months program, there are no credits awarded for individual modules.

All submissions are graded on a scale 1-20, grades 1-3 represent Distinctions and 17-20 referral or fail. Those grades appear on the credit certificate. However the PGCNL itself is not graded it is awarded without grading. Those who take the credit and go forward to the Masters carry the grades with them. The final Masters is graded as Distinction, Merit, or Pass. The grading system is in the student handbook.

# Post Graduate Certificate in the Neuroscience of Leadership

## Deferral Process

Students have the option of deferring from the program and recommencing at a later stage. Deferrals must follow the formal deferral process, they are not granted automatically and are subject to approval. A deferral fee applies.

## Masters Program

The Masters is a two year program comprised of two phases:

- **Phase I:** 12 months of the Post Graduate Certificate course work
- **Phase II:** Additional 12-18 months to complete the Masters (duration depends on the student)

**Phase I (PGCNL)** - coursework focuses on the topics of Decision Making & Problem Solving, Emotional Regulation, Collaborating with Others, and Facilitating Change. Students are assessed on their individual level research, how well they know the neuroscience and how they are applying it to leadership or change.

**Phase II (Masters)** - At the successful completion of Phase I students submit a formal thesis proposal for their Masters project. This is agreed to and approved by the committee. There is an increase focus on self-directed learning and research. It involves 1:1 instruction from the lead professor and monthly instructor-led group lectures and discussions on topics of interest based on the assigned student readings. Students are assessed on their organizational level research as they explore the organizational implications of their chosen project.

More information about the Masters program can be found on the NeuroLeadership website at <http://www.neuroleadership.org/resources/masters.shtml>.

## Post Graduate Certificate in the Neuroscience of Leadership

### Intake Timetable

Activity	October 2011	March 2012
Student Orientation Telecall	3 October 2011	26 March 2012
<b>Module 1 Lessons</b>	<b>10 October - 12 December 2011</b>	<b>26 March – 28 May 2012</b>
Break	19 December - 15 January 2012	4 June – 1 July 2012
Module 1 Essay Submit	2 January 2012	20 June 2012
<b>Module 2 Lessons</b>	<b>16 January - 19 March 2012</b>	<b>2 July – 3 September 2012</b>
Module 1 Essay Feedback	1 March 2012	25 July 2012
Break	26 March - 22 April 2012	10 September – 7 October 2012
Module 2 Essay Submit	9 April 2012	26 September 2012
<b>Module 3 Lessons</b>	<b>23 April - 25 June 2012</b>	<b>8 October – 10 December 2012</b>
Module 2 Essay Feedback	7 June 2012	31 October 2012
Break	2 July - 29 July 2012	17 December – 13 January 2013
Module 3 Essay Submit	16 July 2012	2 January 2013
Submit masters intention	23 July 2012	7 January 2013
<b>Module 4 Lessons</b>	<b>30 July - 1 October 2012</b>	<b>14 January – 18 March 2013</b>
Module 3 Essay Feedback	13 September 2012	6 February 2013
Module 4 Essay Submit	22 October 2012	10 April 2013
Module 4 Essay Feedback	26 November 2012	15 May 2013
End Program Essay Submit	26 November 2012 (TBC)	12 June 2013 (TBC)
Final Assessments Submit	TBC	TBC
Formative Assessment Submit	30 January 2013	1 July 2013
Formative Assessment Feedback	15 February 2013	16 July 2013
Summative Assessment Submit	30 March 2013	30 August 2013
<b>Results &amp; Certification</b>	<b>7 June 2013</b>	<b>6 November 2013</b>

# Post Graduate Certificate in the Neuroscience of Leadership

## Syllabus Summary

**Please note:** The following syllabus summary is provided as a guide only and may be subject to change. In order to keep the course up to the minute with the latest developments in neuroscience, and to accommodate guest lecturer schedules, the lesson content and order may differ from the schedule below during modules.

### Course Mission Statement

The goal of this course is for the student to gain insight into the observable aspects of neuroscience (behavior, memory, emotions), thus enabling them to modulate their interventions in the workplace to improve leadership, learning and change initiatives, and be able to accurately teach people in organizations about the brain.

### Module 1: Decision Making and Problem Solving

The goal of this module is to introduce students to the neurocognitive components underlying the complex decision making/problem solving process, and how to gain control over these components.

Week	Topic	Goal
1	Begin with the end in Mind	After this lesson students will understand the deliverables needed to successfully complete the program.
2	Course Goals & Overview	After this lesson students will be able to describe the basic organization and function of the central nervous system, as well as explain how synaptic transmission occurs throughout the brain via neurotransmitters
3	Frontal Cortex	After this lesson students will be able to describe the utility of the frontal cortex and understand the roles played by the sub-regions in making decisions
4	Attention Part I	After this lesson students will be able to contrast the levels of attention and the purpose of each one, as well as understand and utilize the inverted U theory of arousal/ performance to enhance decision making
5	Attention Part II	After this lesson students will be able to contrast the levels of attention and the purpose of each one, as well as understand and utilize the inverted U theory of arousal/ performance to enhance decision making
6	Memory	After this lesson students should have a basic understanding of the biological theory of memory formation, limitations inherent to the system and how this impacts decision making.
7	Conscious/Unconscious Thought	After this lesson students will be able to explain the difference between conscious and unconscious thought as they relate to decision making, and understand the building blocks of conscious thought as they occur in the brain
8	Cognitive Complexities & Cognitive Biases	At the completion of this lesson students will be able to explain the impact of pushing the PFC to do too much and will understand the effort necessary in getting information organized for making decisions and the hurdles to overcome in the process
9	Insight	At the completion of this lesson students will have an in-depth appreciation of the science behind the concept of insight
10	Research Project Overview	Must complete Act 1 of Your Brain at Work, all audios and readings

# Post Graduate Certificate in the Neuroscience of Leadership

## Syllabus Summary (continued)

### Module 2: Emotional Regulation

The goal of this module is for the student to understand the biological underpinnings of emotional arousal, thereby gaining insight into strategies for modulating this arousal to help facilitate self-change.

Week	Topic	Goal
1	Limbic System	At the completion of this lesson, students will be able to discuss the critical structures of the limbic system, and how these structures modulate emotions
2	Minimize Danger, Maximize Reward	Students will understand the brain's organizing principle of minimizing danger and maximizing reward, as well as the behavioral implications of this strategy.
3	Impact of Overarousal	Students will be able to understand the behavioral implications of overarousal.
4	Emotional Theory	Students will gain a general understanding of the cognitive processes inherent to emotional arousal.
5	Labeling	At the conclusion of this lesson, students will be able to discuss techniques to help control emotional arousal, as well as the biological rationale for these techniques.
6	Expectations	Students will be able to define the concept of expectation, and explain how expectations can modulate brain functioning, thereby altering perceptions.
7	Latest Research	Students will be presented with the latest research in the field.
8	Reappraisal	The goal of this lesson is to have students gain an appreciation of the power of reappraisal in managing increased arousal
9	Mindfulness	Students will understand the importance of perceiving information about their own mental state and how this awareness (mindfulness) can facilitate self-change. Students will be able to apply the concept of mindfulness in facilitating self-change as well as gain insight into their own state through the MAAS
10	Student Pods	Students will collaborate with classmates on what they have learned and how they will apply it in practice in their chosen area of focus.

# Post Graduate Certificate in the Neuroscience of Leadership

## Syllabus Summary (continued)

### Module 3: Collaboration

The goal of this module is for the student to understand the basic social needs of the brain in order to foster better collaboration

Week	Topic	Goal
1	Anatomy of a social brain	After this lesson students should understand the biological need for social connections
2	Philosophy of a social brain	After this lesson, students should be able to identify cognitive processes that interfere with successful collaboration and how to modify these processes.
3	Introduction to SCARF	This lesson will give students an overview of the interpersonal primary rewards or threats that are critical to the brain, and how this knowledge can improve leadership.
4	Empathy and Mirror Neurons	After this lesson the student will understand the anatomy and function of the mirror neurons as well as how it relates to empathy
5	Relatedness	At the completion of week 6 students will be able to explain how and why the brain creates a sensation of connection with others, and how this knowledge can foster better collaboration.
6	Fairness	At the completion of this week, students will appreciate the intrinsic reward of fairness, as well as the dynamic between fairness and expectations as it applies to facilitating collaboration.
7	Status	Students will understand the power of status or perceived status, and how to modulate it to enhance collaboration with others.
8	Certainty/Autonomy	After this lesson the student will understand the link between autonomy and certainty, and how this relates to being a significant driver of reward and threat.
9	Practical Applications of SCARF	With a detailed background on the components of SCARF, the student will be able to apply these principles to the workplace setting in order to foster optimal collaboration with various groups.
10	Student Pods	Students will collaborate with classmates on what they have learned and how they will apply it in practice in their chosen area of focus.

# Post Graduate Certificate in the Neuroscience of Leadership

## Syllabus Summary (continued)

### Module 4 – Facilitating Change

The goal of this module is to present students with an understanding of the critical variables inherent to successful change management, as well as techniques for controlling these variables. The first 6 weeks will focus on discussions of facilitating change with guest lecturers. Weeks 7-10 will then be student presentations (15 minutes total) of their prospective research project to the class.

Week	Topic	Goal
1	Change Theory and Neuroscience	This class will explore the major change theories and the links to neuroscience within each
<b>Individual Change</b>		
2	Driving Change Through Goals	Students will gain an understanding of how the deeper neuroscience involved in goal pursuit relates to effective change management
3	Driving Change Through Feedback	This lesson will help students understand a wide set of issues involved in the design, delivery and receipt of how feedback is typically delivered, in order to design feedback interventions that are more likely to facilitate positive change.
4	Mindfulness – Part II	Students explore the deeper neuroscience involved in the activation of mindfulness and the role of this in being a change leader.
<b>Team Change</b>		
5	Designing Interventions – Facilitating Change in Groups – Part I	Students will explore the deeper neuroscience involved in how teams interact as they try to collaborate around common goals.
6	Designing Interventions – Facilitating Change in Groups – Part II	Students will explore the components of effective change initiatives, understanding how these components interact and synergise to create sustained change.
7	AGES Model with Teams	This lesson will allow students to apply the concepts of the AGES model to a group setting in an attempt to optimize change management
<b>Organizational Change</b>		
8	Organizational and Cultural Change	Students will gain insight into the current state of knowledge for the leadership of change
9	Cultural Neuroscience	Students will explore the impact of cultural variables on organizational change through the lens of neuroscience, and the strategies for minimizing their impact
10	Role of the Leader in Facilitating Change	Students will review a summary of the key neuroleadership principles that can help optimize successful change management as a leader