

Report about the state of mathematics in Thailand (April 21, 2009)

1. There are 22 universities where mathematics is taught as follows:

1. **Burapha University (BUU)**
2. **Chiangmai University (CMU)**
3. **Chulalongkorn University (CU)⁽¹⁾**
4. **Kasetsart University (KU)**
5. **Khon Kaen University (KKU)**
6. **King Mongkut's Institute of Technology Ladkrabang (KMITL)⁽¹⁾**
7. **King Mongkut's University of Technology North Bangkok (KMUTNB)**
8. **King Mongkut's University of Technology Thonburi (KMUTT)⁽²⁾**
9. **Maejo University (MJU)**
10. **Maharakham University (MSU)**
11. **Mahidol University (MU)**
12. **Naresuan University (NU)**
13. **Prince of Songkla University, Hat Yai Campus (PSU, Hat Yai)**
14. **Prince of Songkla University, Pattani Campus (PSU, Pattani)⁽²⁾**
15. **Ramkhamhaeng University (RU)**
16. **Silpakorn University (SU)**
17. **Srinakharinwirot University (SWU)⁽³⁾**
18. **Suranaree University of Technology (SUT)**
19. **Thaksin University (TSU)⁽⁴⁾**
20. **Thammasat University (TU)⁽⁵⁾**
21. **Ubon Rajathanee Univesity (UBU)⁽⁴⁾**
22. **Walailuk University (WU)**

(1) includes computer science

(2) includes computer science and statistics

(3) includes computer science, math education and statistics

(4) includes computer science, information technology and statistics

(5) includes statistics

2. The list of universities with significant research activities in mathematics

Burapha University: Fixed point theory and applications, Numerical analysis, Mathematical modeling, Partial difference equations, Statistics

Chiangmai University: Functional analysis, Banach spaces theory, Fixed point theory and Applications, Distribution theory, Complex analysis, Control theory, C* Algebra, Operator theory, Ring and module theory, Semigroups, Combinatorics and Graph theory, Algebraic graph theory, Optimization, Mathematical modeling, Universal algebras.

Chulalongkorn University : Algebraic Semigroup theory, Bio-informatics, Coding theory, Combinatorics and graph theory, Fixed point theory, Fluid mechanics, Functional analysis,

Γ -structure theory, Geometry, Hyperstructure theory, Mathematical logic and set theory, Number theory, Numerical analysis, Operations research, Partial differential equations, Probability theory and stochastic analysis, Ring theory, Topology, Wavelet theory.

Kasetsart University : Algebra, Number theory, Financial mathematics, Fluid dynamics, classical analysis.

Khon Kaen University : Functional analysis, Universal algebra, Probability theory, Number theory, Numerical analysis, Graph and combinatorics, Fixed-point theory and Semigroups.

King Mongkut's Institute of Technology Ladkrabang : Partial differential equation, Nonlinear ordinary differential equation, Integral equation, Differential geometry, Calculus of variation, Mathematical modelling, Optimization, Supply chain logistics, Global optimization, Environmental model, Dynamical systems, Numerical analysis, Finite element method, Finite difference method, Flow analysis, Polymer processing, Data analysis, Applied mathematics for medical science, Nonlinear functional analysis, Special function, Spectrum theory, Graph theory, Topology, Real and Complex analysis, Set theory, Rough sets, Linear algebra, Transformation semigroups, Matrix theory, Operator theory, Vector analysis

King Mongkut's University of Technology North Bangkok : Computational fluid dynamics, Mathematics modeling, Graph theory, Differential equations, Numerical analysis.

King Mongkut's University of Technology Thonburi : Calculus, Differential equations, Function of complex variables, Principle of mathematics, Visual aid for basic concepts of mathematics, Operations research, Optimization, CAI, Numerical analysis, Numerical ocean modeling, Finite difference method, Mathematical in biology and ecology, Atmospheric modeling, Computational fluid, Computer aided geometric design (CAGD), Parallel numerical algorithms and computing, Finite volume methods, Computational fluid dynamics, Combinatorics, Coding theory, Theoretical computer science, Statistics, Teaching mathematics, Graph theory, Nonlinear functional analysis and Fixed point theory and applications.

Maejo University : Fixed Point Theory, Neural networks, Existence and Uniqueness of Differential equations.

Maharakham University : Graph theory, Numerical analysis, Ring and module theory, Functional analysis, Non-linear, Statistics.

Mahidol University : Functional analysis, Mathematical modeling, Dynamical systems, Algebra, Numerical analysis and computational mathematics, Operations research and logistics, Computer applications, Geometry, Analysis.

Naresuan University : Nonlinear analysis, Convex and variational analysis, Semigroups, Number theory.

Prince of Songkla University, Hat Yai Campus : Semigroups, Analysis, Mathematical and statistical models.

Prince of Songkla University, Pattani Campus : Research methodology in epidemiology, environmental science and social science, Software engineering, Computational science, Financial mathematics, Applied mathematics, Geometry of metric spaces of bounded curvature, Universal algebra.

Silpakorn University : Universal algebra, Graph theory, Algebra, Coding theory, Functional analysis, Mathematical modeling (geophysics and medical science) complex analysis and PDEs.

Srinakharinwirot University : Graph theory, Design theory, Combinatorics, Mathematics education (Problem solving), Computer education (content management system).

Thaksin University : Ring and module, Mathematical modeling, Applied mathematics, Graph theory, Number theory, Mathematics education.

Thammasat University : Group theory, Graph theory, Functional analysis, Numerical linear algebra, Nonlinear partial differential equations. Mathematical modeling, Numerical simulation computational sciences, Probability and statistics theory, Mathematical statistics, Statistical modeling, Item response theory, Time series, Social science research

Ubon Rajathanee Univesity : Functional analysis, Fixed point theory and applications, Mathematics education: advanced mathematical thinking, symplectic reflection, Poisson algebras and Poisson modules, Atmospheric model, Dynamical system, Representations of Lie groups, Finite difference method of an air pollution model.

Walailuk University : Probability theory, Stochastic calculus, Complex analysis, Graph theory, Data Classification.

3. The estimated number of professors in mathematics :

Name	Doctoral degree	Master's degree	Bachelor's degree	Prof.	Assoc. Prof.	Asst. Prof.	Instructor	Total
BUU	13	18			2	6	23	31
CMU	23	19	2	3	9	10	22	44
CU	40	14		3	19	19	13	54
KU	7	15	1	1	3	7	12	23
KKU	14	15			3	10	16	29
KMITL	8	17			5	3	17	25
KMUTNB	6	17			6	4	13	23
KMUTT	14	17	2		3	12	18	33
MJU	2	9				3	8	11
MSU	7	22			1	7	21	29
MU	23	8		2	7	7	15	31
NU	15	16		1	4	7	19	31
PSU(HatYai)	10	30			3	11	26	40
PSU(Pattani)	11	14				2	23	25
RU	1	13			11	1	2	14
SU	10	11		1	2	1	17	21
SWU	9	26		1	3	9	22	35
SUT	9			2	3	1	3	9
TSU	8	31			4	5	30	39
TU	16	26			9	13	20	42
UBU	13	11	1			3	22	25
WU	4	3				1	6	7
Total	263	352	6	14	97	142	368	621

4. The estimated number of research mathematicians :

Name	
BUU	10
CMU	34
CU	37
KU	10
KKU	15
KMITL	9
KMUTNB	8
KMUTT	19
MJU	8
MSU	19
MU	15

Name	
NU	16
PSU (Hat Yai)	25
PSU (Pattani)	16
SU	21
SWU	6
SUT	4
TSU	12
TU	15
UBU	11
WU	5
Total	315

5. The Mathematical Association of Thailand is the only mathematical society and members are institutions.

6. A list of well-known mathematicians in the world-wide mathematical community.

Professor Y. Kemprasit, Chulalongkorn University: Algebraic semigroup theory, Ring theory and Algebraic hyperstructure theory.

Professor C. Lursinsap, Chulalongkorn University: Neural networks, Machine intelligence , VLSI design , Fault tolerance design, Bio-informatics and Plant modeling and simulation.

Professor K. Neammanee, Chulalongkorn University: Probability and statistics.

Professor S. Plubtieng, Naresuan University: Fixed point theory related to convex and variational analysis.

Professor Y. Lenbury, Mahidol University: Dynamical systems, Mathematical modeling.

Professor C. Rattanaprasert, Silpakorn University: Universal algebras.

Professor S. Suantai, ChiangMai University, ChiangMai: Fixed point theory, Nonlinear analysis.

Professor S. Dhampongsa, ChiangMai University, ChiangMai: Fixed point theory.

Professor A. Kananthai, ChiangMai University, ChiangMai: Distribution theory.

Professor N. Punnim, Srinakharinwirot University: Graph theory, Design theory.

Professor P. Sattayatham, Suranaree University of Technology, Financial mathematics, Control theory.

Professor V. Laohakosol, Kasetsart University: Algebraic number theory, Classical analysis.

Assoc. Prof. P. Niamsup, ChiangMai University, ChiangMai: Complex analysis and control theory.

Asst. Prof S. Saejung, Khon Kaen University: Fixed point theory.

7. An estimation of the number of mathematical publications that have been produced by mathematicians living in Thailand and that have appeared in respected mathematical journals in 3 years.

Name	
BUU	12
CMU	60
CU	90
KU	36
KKU	50
KMITL	20
KMUTNB	12
KMUTT	42
MJU	3
MSU	15
MU	60

Name	
NU	60
PSU (Hat Yai)	12
PSU (Pattani)	23
SU	27
SWU	14
TSU	32
TU	10
UBU	7
WU	5
Total	590

8. There are 2 mathematical journals published in Thailand:

The Thai Journal of Mathematics is organized and supported by the Mathematical Association of Thailand and Thailand Research Council.

The East-West Journal of Mathematics is organized and supported by Faculty of Science, Khon Kaen University and the University of the Thai Chamber of Commerce.

9. A brief overview of educational activities.

The Annual Meeting in Mathematics is held on March or May each year.

The host institute is nominated by The Mathematical Association of Thailand.

International Conference on Mathematics and Applications, December 2009. MU.

International Conference on Algebra and Related Topics, May 28-30, 2008. CU.

International Conference on Mathematics and Applications, August 2007. MU.

The 8th International Conference on Fixed Point Theory and Its Applications, July 16-22, 2007, CMU.

International Conference on Discrete Mathematics 2007, May 2007. SWU.

International Conference on Analysis and Its Applications, May 2006. CU.

KMITL International Conference on Science and Applied Science, March 2006. KMITL.

The 2nd Workshop on Graph Theory 2006, March 2006. SWU.

International Conference on Mathematics and Applications, December 2005. MU.

The 2nd International Symposium on Mathematical Statistic and Computer Science, 2005 KMITL.

Workshop on Graph Theory 2005, January 2005. SWU.

International Conference on Algebra, May 2004. CU.

The 11th International Conference on Finite or Infinite Dimensional Complex Analysis and Applications July 17-21, 2003. CMU.

The Annual Pure and Applied Mathematics and Conference, May 2009, CU.

The Annual Mathematics Conference, March 2008, CU.

5th Conference of Algebraist in Thailand, March 2008, KKU.

3rd Conference of Algebraist in Thailand, August 2005, KKU.

National Conference “Progress in Mathematics 2004”, January 2004. MU.

National Conference “Progress in Mathematics 2003”, May 2003. MU.

The National Conference in Mathematics, May 2003. KMUTT.