

IEEE Xi'an Section Report

PART A - SECTION SUMMARY

A.1 Executive Summary

- Section Executive Committee Member List

Chair: Jingdong Chen, Northwestern Polytechnical University

Vice-chair: Jinjun Liu, Xi'an Jiaotong University; Min Sheng, Xidian University

Steering Committee Chair: Jianguo Huang, Northwestern Polytechnical University

Fellow Recommend Committee Chair: Xiaohong Guan, Xi'an Jiaotong University

Awards & Recognition Committee Chair: Xinbo Gao, Xidian University

Membership Development Committee Chair: Zhen Wang, Northwestern Polytechnical University

Technical Activities Committee Chair: Zhiwen Yu, Northwestern Polytechnical University

Student Activities Committee Chair: Feng Gao, Xi'an Jiaotong University

WIE Committee Chair: Wen Zhang, Northwestern Polytechnical University

Newsletter Editor Committee Chair: Qunfei Zhang, Northwestern Polytechnical University

Young Scholars Committee Chair: Jie Chen, Northwestern Polytechnical University

Educational Activities Committee Chair: Qunfei Zhang, Northwestern Polytechnical University

Conference Committee Chair: Chengbing He, Northwestern Polytechnical University

Treasurer: He Xiang, Northwestern Polytechnical University

Office of IEEE Xi'an Section Director: He Xiang, Northwestern Polytechnical University

Secretary of IEEE Xi'an Section: Chengbing He, Northwestern Polytechnical University

- Section Highlights

- Major Events (International, National)

Successfully organized ICEICT2024 (IEEE 7th International Conference on Electronic Information and Communication Technology)

Successfully organized ISCTech2024 (IEEE 12th International Conference on Information Systems and Computing Technology)

Successfully organized CSTE2024 (IEEE 6th International Conference on Computer Science and Technologies in Education)

Successfully organized ICID2024 (IEEE 5th International Conference on Intelligent Design)

Successfully organized ICMEE2024 (IEEE 10th International Conference on Mechanical and Electronics Engineering)

Successfully organized ISSET2024 (IEEE 3rd International Symposium on Semiconductor and Electronic Technology)

Successfully organized ICITE2024 (IEEE 9th International Conference on Intelligent Transportation Engineering)

Successfully organized ICECE2024 (IEEE 7th International Conference on Electronics and Communication Engineering)

Successfully organized ICMSP2024 (IEEE 6th International Conference on Intelligent Control, Measurement and Signal Processing)

Successfully organized ICEMCE2024 (IEEE 8th International Conference on Electrical, Mechanical and Computer Engineering)

- Major Chapter Activities

Successfully organized IEEE ICSPCC 2024 (2024 IEEE International Conference on Signal Processing, Communications and Computing)

Successfully organized AIoT Sys2024 (2024 International conference on Artificial Intelligence of Things and Systems)

Successfully organized AISN2024 (2024 6th International Workshop on Advanced Intelligent and Self-organizing Networks)

Successfully organized 2024 China-Japan Forum on the Development of Electrical Materials

Successfully organized The 3rd International Colloquium on Discrete Event Dynamic Systems

- Major Student and Affinity Group Activities

N/A

- Awards

N/A

A.2 Financial Report

- Summary (as per submitted on NetSuite)

In 2024, the total receipts of Xi'an section is about \$53,012.51 . It includes the balance of 2023 about \$33,926.08, the section rebate is about \$16,008.70 , the student branch chapter award & rebate is \$1,520.00, the interest is about \$1,557.73.

The total 2024 expenses of Xi'an section is about \$2,826.54.

The balance of 2024 is about \$50,185.97 .

- Any other financial activities

Extra financial support mainly comes from the Northwestern Polytechnical University.

PART B - ORGANIZATIONAL ACTIVITIES

B.1 Membership Development Activities

- Total number of active members in the past 3 years.

By Dec, 2025, the total amount of active members of IEEE Xi'an Section is 3763 while the number was 3405 for the year 2023 and 2805 for the year 2022.

In 2024, we continued our effort to increase membership, especially the student members.

- Summary and evidence of work done to improve the value of membership, which leads to retention and growth of members

Actively promote and encourage students to join IEEE; Existing IEEE Fellow members actively develop new fellows.

With our effort, the membership of IEEE Xi'an Section increased about 11%, and four professors were nominated as new IEEE Fellows of 2024.

B.2 Chapter Activities

- Total number of Chapters in the Section

By 2024, in total, there are 21 chapters in Xi'an Section, all of which are active. The chapters are as follows:

- (1) IEEE Xi'an Electronic Device Chapter
- (2) IEEE Xi'an Signal Processing Chapter
- (3) IEEE Xi'an Computational Intelligence Chapter
- (4) IEEE Xi'an Communication Chapter
- (5) IEEE Xi'an Systems, Man, and Cybernetics Chapter
- (6) IEEE Xi'an Electromagnetic Compatibility Chapter
- (7) IEEE Xi'an Power & Energy Chapter
- (8) IEEE Xi'an Reliability Chapter
- (9) IEEE Xi'an Dielectrics and Electrical Insulation Chapter
- (10) IEEE Xi'an Broadcast Technology Chapter
- (11) IEEE Xi'an Geoscience & Remote Sensing Chapter
- (12) IEEE Xi'an Circuits and Systems Society Chapter
- (13) IEEE Xi'an Vehicular Technology Chapter
- (14) IEEE Xi'an Power Electronic Chapter

- (15) IEEE Xi'an Nuclear and Plasma Sciences Society Chapter
- (16) IEEE Xi'an Industrial Electronics Society Chapter
- (17) IEEE Xi'an Instrumentation and Measurement Society Chapter
- (18) IEEE Xi'an Systems, Man, and Cybernetics and Control Systems Societies Joint Chapter
- (19) IEEE Xi'an Computer Chapter
- (20) IEEE Power & Energy-Taiyuan Chapter
- (21) IEEE Xi'an Microwave Theory and Techniques and Antenna and Propagation Joint Chapter

- Number of Chapters formed in the current year

Two Chapters were formed in 2024, namely:

- (1) IEEE Xi'an Microwave Theory and Techniques and Antenna and Propagation Joint Chapter
- (2) IEEE Power & Energy-Taiyuan Chapter

- Number of active Chapters (Chapters who have reported required number of meetings during the year)

All twenty-one chapters have reported required number of meetings during 2024, all active.

- Summary of Chapter activities (Chapter wise with attachment table/information)

IEEE Xi'an Electronic Device Chapter

No.	Date	Topic
1	05/11/2024	Prof. Jamal Deen delivered a presentation on "Compact Modeling of Organic/Polymeric Thin Film Transistors for Flexible Electronics"
2	05/11/2024	Prof. David Atienza Alonso delivered a lecture on "Dynamic Thermal Management and Adaptive Modeling for 3D AI Chips"
3	08/16-17/2024	Hold MOS-AK Xi'an Compact Modeling Workshop
4	10/26/2024	Prof. Xiaohong Guan delivered a lecture on "Cyber-physical Systems and Zero-carbon computing and Data Centers"
5	10/26/2024	Prof. Zhonglin Wang, Xuemin Shen delivered series of lectures

IEEE Xi'an Signal Processing Chapter

No.	Date	Topic
1	08/19-22/2024	Hold IEEE ICSPCC2024, Bali, Indonesia

IEEE Xi'an Communication Chapter

No.	Date	Topic
1	01-11/2024	Over 50 distinguished academics made technique lectures and academic reports
2	12/2024	2024 6th International Workshop on Advanced Intelligent and Self-organizing Networks
3	10/27-28/2024	Hold the Frontier Forum on Ubiquitous Intelligent Communication Networks

IEEE Xi'an Systems, Man, and Cybernetics Chapter

No.	Date	Topic
1	03-11/2024	Over 10 distinguished academics made technique lectures and academic reports

2	07/13/2024	Hold the 3rd International Colloquium on Discrete Event Dynamic Systems
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IEEE Xi'an Microwave Theory and Techniques and Antenna and Propagation Joint Chapter

No.	Date	Topic
1	10/27/2024	Hold 2024 Seminar on Sensing Technology of Electromagnetic Information
2	10/27/2024	Hold the 2024 International Conference on Information and Intelligence
3	08/17/2024	Hold the ACES-China
4	06-10/2024	Over 20 distinguished academics made technique lectures and academic reports

IEEE Xi'an Electromagnetic Compatibility Chapter

No.	Date	Topic
1	05/26-28/2024	Prof. Farhad Rachidi delivered a lecture on "Santis Lightning Research Facility: Recent Developments and Findings"
2	05/27-28/2024	Prof. Rachidi conducted the in-person portion of the "Advanced Course on Lightning 2024"
3	04/21-30/2024	Experts from IEP RAS presented lectures on topics such as SOS semiconductor switches, diode sharpeners and SOS pulsed sources.
4	10/28-30/2024	Prof. Yi Huang and Professor Jian Yang delivered lectures on "Dispersive Material Antennas" and "Advancements in Gap Waveguide Technology"
5	06/25-28/2024	Prof. Igor Simone Stievano and Prof. Riccardo Trinchero delivered lectures on "Behavioral and Topological Modeling of Electrical & Electronic Systems" and "Machine Learning Based Surrogate Models of Electronic Devices and Circuits"

IEEE Xi'an Power & Energy Chapter

No.	Date	Topic
1	04/23/2024	Hold the IEEE PES Day 2024
2	11/04/2024	IEEE Fellow Prof. Anjan Bose delivered a lecture on "Evolving Planning Criteria for a Sustainable Power Grid"

IEEE Xi'an Dielectrics and Electrical Insulation Chapter

No.	Date	Topic
1	09/06-10/2024	Hold the 2024 China-Japan Forum on the Development of Electrical Materials
2	04/09/2024	IEEE Fellow Prof. Chen Guanghui delivered a lecture on "Research on HVDC Insulating Materials"

IEEE Xi'an Broadcast Technology Chapter

No.	Date	Topic
1	18-20/10/2024	Hold the ICICC2024
2	07/04/2024	Prof. Nan Yang delivered a lecture on "Unlocking the Future Terahertz Communications for 6G and Beyond Wireless Era"
3	06/02/2024	Prof. Lin Cai delivered a lecture on "Intelligent Protocol Architecture for 6G"
4	08/21/2024	Prof. P. Takis Mathiopoulos delivered a lecture on "A Novel Hybrid Satellite Aerial Terrestrial (HSAT) Network with NonOrthogonal Multiple Access (NOMA) for 6G Applications"
5	18-20/10/2024	Hold the ICITE2024

IEEE Xi'an Circuits and Systems Chapter

No.	Date	Topic
1	01-11/2024	Over 10 distinguished academics made technique lectures and academic reports

IEEE Xi'an Vehicular Technology Chapter

No.	Date	Topic
1	01/05/2024	Held the professional Forum on "The next generation IoT key technologies"
2	03/03/2024	IEEE Fellow Prof. Niyato, Prof. Zhuang Weihua, Prof. Yu Shui, Prof. Lian Zhao, Chen Xiaohua delivered series of lectures.

IEEE Xi'an Nuclear and Plasma Sciences Society Chapter

No.	Date	Topic
1	04/17-19/2024	Prof Naum S. Ginzburg delivered lectures on Research on "High-Power Microwave Generation Technology"
2	06/14/2024	Prof. John P. Verboncoeur delivered lectures on "From Multipactor to Ionization Breakdown Review and Recent Advances"
3	06/14/2024	IEEE Fellow, APS Fellow Dr. Steven Gold delivered lectures on "A Brief History of IEEE, NPSS, PSAC, ICOPS, and TPS; Introduction to the IEEE/NPSS and the NPSS Chapters Program"
4	06/26-20/2024	Technical co-sponsor for the 51st IEEE International Conference on Plasma Science & Asia-Pacific Conference on Plasma and Terahertz Science (ICOPS & APCOPTS 2024) in Beijing International Convention Center, Beijing, China.

IEEE Xi'an Industrial Electronics Society Chapter

No.	Date	Topic
1	2024	Invited Prof. Juan J. Rodríguez-Andina to visit the Chapter and delivered a lecture.
2	2024	Help organize and sponsor the 10th IEEE International Conference on Unmanned Underwater Systems and Technology.
3	2024	Invited Prof. Guofeng Zhang to give Academic Presentation and delivered a lecture.
4	2024	Invited Prof. Okyay Kaynak to visit the Chapter and delivered a lecture.
5	2024	Developed more than 20 IES Student Members in the Chapter.

IEEE Xi'an Instrumentation and Measurement Society Chapter

No.	Date	Topic
1	11/2024	Prof. Denis Politis delivered a lecture on "Metal Forming in the Production of Lightweight Components".
2	10/2024	Prof. David Thompson delivered a lecture on "Aerodynamic noise from trains: research at ISVR".

IEEE Xi'an Section, Systems, Man, and Cybernetics and Control Systems Societies Joint Chapter

No.	Date	Topic
1	03/20/2024	Dr. Chen Guangke delivered a lecture on "Security and Privacy of Voiceprint Recognition Systems".
2	04/22/2024	Dr. Zhang Yabin delivered a lecture on "Robust Open-world Learning Against Out-of-distribution Data".
3	07/04/2024	Dr. Xuhongcai delivered a lecture on "Double-Branch Multi-Attention based Graph Neural Network for Knowledge Graph Completion".

IEEE Xi'an Computer Chapter

No.	Date	Topic
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1	10/17-19/2024	Hold 2024 International Conference on Artificial Intelligence of Things and Systems (AIoTSys2024).
2	10/26/2024	Hold the Forum on Human machine object fusion swarm intelligence computing (CNCC2024).
3	11/17/2024	Hold the Summit on Digital Literacy and Intelligent Computing.
4	05/31/2024	Hold the Cross-border Forum on Digital Communication and Innovative Development of Intangible Cultural Heritage.

IEEE Power & Energy- Taiyuan Chapter

No.	Date	Topic
1	10/19/2024	Hold the ICPEA 2024
2	09/18/2024	Prof. Jessica Bian delivered a lecture
3	09/12/2024	Hold the National Science Popularization Day Activity of China Energy Research Association

B.3 Professional and Continuing Education Activities

1. Successfully Organized IEEE ICSPCC2024 (2024 IEEE International Conference on Signal Processing, Communications and Computing).

In August 19-22, 2024, we hosted “2024 IEEE International Conference on Signal Processing, Communications and Computing” in Bali, Indonesia.

More than one hundred of specialists and scholar from mainland China, HongKong, Pakistan, India, South Korea, etc. attended this conference.

2. Successfully Organized 2024 AIoTSys (International Conference on Artificial Intelligence of Things and Systems)

In October 17-19, 2024, we hosted “2024 International Conference on Artificial Intelligence of Things and Systems” in Hangzhou, China.

More than two hundreds of specialists and scholar from Australia, Canada, Japan, Franch, America, Romania, etc. attended this conference.

3. Successfully organized 2024 International Applied Computational Electromagnetics Society (ACES-China 2024)

In August 16-19, 2024, we hosted “2024 International Applied Computational Electromagnetics Society” in Xi’an, China.

More than six hundreds of specialists and scholar from USA, Japan, Spain, Pakistan, Mainland China, Hong Kong, Taiwan attended this conference.

4. Successfully organized 2024 China-Japan Forum on the Development of Electrical Materials

In September 6-10, 2024, we hosted “2024 China-Japan Forum on the Development of Electrical Materials” in Xi’an, China.

More than 28 specialists and scholars from Japan and Mainland China delivered lectures during this conference.

5. Successfully organized The 3rd International Colloquium on Discrete Event Dynamic Systems

In July13-14, 2024, we hosted “The 3rd International Colloquium on Discrete Event Dynamic Systems” in Xi’an, China.

More than one hundred and fifty specialists and scholar from Australia, Britain, Sweden, Norway and Mainland China attended this conference.

6. Successfully organized ICITE2024 (2024 IEEE the 8th International conference Transportation Engineering)

In October 19-21, 2024, we hosted “2024 IEEE the 8th International conference Transportation Engineering” in Xi’an, China.

More than one hundred and fifty specialists and scholar from both domestic and international sources in China attended this conference.

7. Successfully organized ICEICT2024 (2024 IEEE 7th International Conference on Electronic Information and Communication Technology)

In July 30 to August 2, 2024, we hosted “2024 IEEE 7th International Conference on Electronic Information and Communication Technology” in Xi’an, China.

More than two thousand specialists and scholars from all over the world attended this conference.

B.4 Students Activities

- Total number of Student Branches in the Section

By 2024, there are 4 student branches in IEEE Xi’an Section.

- (1) Xi'an Jiaotong University Student Branch
- (2) Northwestern Polytechnical University Student Branch
- (3) Xidian University Student Branch
- (4) Xi'an Institute of Optics and Precision Mechanics Student Branch

- Number of Student Branches formed in the current year

No new student branch was formed in 2024.

- Section level student activities (student congress, paper and other contests, awards etc.)

N/A

- Number of active Student Branches (Student Branches who have reported required number of meetings during the year)

Four student branches have reported required number of meetings, all active.

- Summary of Student Branch activities (Student Branch wise with attachment table/information)

Xi'an Jiaotong University Student Branch

No.	Date	Topic
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1	11/8-11/2024	Volunteer work for CPEEC 2024 & CPSSC 2024
2	04/22/2024	Volunteer work for IEEE PES DAY 2024
3	06/20-21/2024	Volunteer work for PEREC 2024

Northwestern Polytechnical University Student Branch

No.	Date	Topic
1	08/17/2024	Volunteer work for CSAA/IET AUS2024
2	07/30-08/2/2024	Volunteer work for IEEE ICEICT 2024
3	10/18-20/2024	Volunteer work for 10th USYS
4	08/19-22/2024	Volunteer work for IEEE ICSPCC 2024

Xidian University Student Branch

No.	Date	Topic
1	10/26-27/2024	Volunteer work for ICAI 2024
2	05/24-26/2024	Volunteer work for CCIG 2024
3	08/24/2024	Volunteer work for CAAI 2024

B.5 Affinity Group Activities

- Young Professional (YP)

There is currently no affinity group in IEEE Xi'an Section.

- Women In Engineering (WIE)

There is currently no affinity group in IEEE Xi'an Section.

- Life Member (LM)

There are 4 Life Members in IEEE Xi'an Section.

- (1) Changxin Fan from Xidian University
- (2) Xiaohong Guan from Xi'an Jiaotong University
- (3) Nan-ning Zheng from Xi'an Jiaotong University
- (4) Xi-fan Wang from Xi'an Jiaotong University

B.6 Awards & Recognition Activities

- Award constituted by the Section

Award 1: Founder's Lifetime Achievement Award to Prof. Jianguo Huang for recognizing his foundational role and long-lasting contributions to the Section

Award 2: Outstanding Activity Engagement Award to 8 Professors:

Jiandong Li,
Ying Liu,
Lichen Jiao,
Zhou Su,
Huiping Li,
Xingwu Zhang,
Bin Guo,
Xiaoqing Han,

for demonstrating their dedication and contributions through active involvement in supporting the Section's activities

Award 3: Outstanding Student Leader Award to 3 students:

Lingling Zhang,
Jinming Chai,
Tong Wu,

for their significant contributions to the success and growth of student activities within the Section

Award 4: Outstanding Service Award to 8 persons:

Jinjun Liu,
Min Sheng,
Jianguo Huang,
Wen Zhang,
Qunfei Zhang,
Jie Chen,
Chengbing He,
Yan He,

for their exceptional dedication, outstanding contributions, and tireless service to the development and success of the IEEE Xi'an Section

• Please list all Awards and Recognitions received by the Section, and members in the Section, from R 10 and IEEE HQ during the year

N/A

B.7 Communication Activities (Newsletter, Home Page, E-mail etc.)

• Newsletter (name and number of issues in the year)

N/A

• Home Page of the Section (give the URL and how often it is updated)

<http://www.ieeexiansection.org>, updated about every three months.

- Other means of contacts with Section members including social media

IEEE Xi'an Section normally contacts with its members directly with emails, informing them when there are some activities or some important information. We also provide support to students who present papers at international conferences.

B.8 Industry Relations

- Membership growth and retention

N/A

- Activities for/with industrial members

N/A

B.9 Humanitarian Technology Activities

• Humanitarian Technology related activities supported by the Section including collaboration with other OUs.

N/A

- SIGHT Activities

N/A

B.10 Community Activities

- IEEE Social activities (Family Day, IEEE day, Engineers Week)"

N/A

PART C - OTHERS

C.1 Special Events

- Please briefly describe the importance of special events and the outcomes achieved

N/A

- Funding secured from the IEEE and external sources including sponsorships

N/A

C.2 Relationship with National and International Societies and Non-Government Organizations (NGO)

- Nature of relationship and details of any formal agreement signed

N/A

- Details of joint activities

N/A

- Benefit to IEEE members (for example discounts, access to technical information etc.)

N/A

- Benefit to Section (for example help in membership development, venue facilities, cost saving etc.)

N/A

C3. Collaboration with other IEEE Sections

- Support extended to neighboring Sections

N/A

- Joint activities with any other Section

Organized IEEE ICSPCC with IEEE HK Section

C.4 Support extended to Sub-sections & Society Chapters within the Section

- Support extended for organizing technical, educational and professional activities

N/A

- Joint activities for membership development

N/A

- Support extended for the formation of a Sub-section or transition of a Sub-section into a full Section

N/A

C.5 Best Practices of your Section (which you would like to share with other Sections for the benefits of members)

C.6 Problems anticipated and suggestions for solutions, if any

PART D - GOALS AND PLANS

D.1 Continuation of project/activity in progress and their implementation plans

D.2 Goals and Future Plans

- 1) Perfect IEEE Xi'an Section and establish new chapters.
- 2) Prepare establishing WIE for woman and GOLD for young scientists.
- 3) Develop service of membership and upgrading of member class.
- 4) Prepare assisting and holding for international conference.
- 5) Invite worldwide famous specialists and scholars for academic communication.
- 6) Establish long-term partnership with Hi-Tech enterprises in Xi'an.
- 7) Enhance the work of student branches for communication, training and competition.
- 8) Perfect the website of IEEE Xi'an Section.
- 9) Upload related summaries and reports in time.
- 10) Enhance the relationship with Northwestern Polytechnical University for more support.

D.3 Any innovative ideas to make IEEE more creative and value added for sustaining the membership retention and recruitment goals.

D.4 Business Plan for Sustainable Growth and Financial Stability.