

Study on the Current Development of Industrial Design Major and Product Design Major in Hangzhou's Universities in China

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ABSTRACT

The Study systematically organizes and study on the current development of Industrial Design Major and Product Design Major in Hangzhou's Universities in China. Using literature collection methods, collecting relevant literature information on CNKI, official websites of universities, official websites of affiliated colleges, etc., and systematically organized it in the form of text, pictures and tables. After collating, it is concluded that there are 8 universities in Hangzhou, China, offering Industrial Design Major and Product Design Major. And each university has its different major characteristics.

KEYWORDS

Current Development; Industrial Design Major; Product Design Major; Hangzhou's Universities; China

1 Introduction

Chinese economy cannot be separated from the manufacturing industry, which in turn is closely related to industrial design and product design. In Chinese colleges and universities, the general class enrollment is industrial design, and the art class enrollment is product design. After the researcher compiled, the universities in Hangzhou, China that offer Industrial Design Major and Product Design Major, as shown in Table. 1. As of June 2022, there are 8 universities that offer Industrial Design Major and Product Design Major, namely: 1) Zhejiang University: offered Industrial Design Major in 1990, 2) Zhejiang University of Technology: offered Industrial Design Major in 1993, 3) Zhejiang Sci-Tech University: offered Industrial Design in 1996, later offered Product Design Major, 4) Zhejiang A&F University: offered Industrial Design Major in 1999, 5) Hangzhou Dianzi University: offered Industrial Design Major in 2000, later offered Product Design Major, 6) China Jiliang University: offered Industrial Design Major in 2002, offered Product Design in 2013, 7) Zhejiang Gongshang University: offered Product Design Major in 2012, 8) Hangzhou Normal University: offered Industrial Design Major in 2022.

2 The Current Development of Industrial Design Major in Zhejiang University

(1) Current development of industrial design major

Zhejiang University's Industrial Design Major, which is part of the Department of Industrial Design, College of Computer Science and Technology. College of Computer Science and Technology, Zhejiang University was established in 1978^[1], the Department of Industrial Design was established in 1990^[2,3], the logo of College of Computer Science and Technology, Zhejiang University, as shown in Figure. 1. Existing institute related to industrial design in the College of

Table.1 Hangzhou's Universities with Industrial Design Major and Product Design Major in China

University	College	Department	Major	Department Establishment
Zhejiang University	College of Computer Science and Technology	Department of Industrial Design	Industrial Design	1990
Zhejiang University of Technology	School of Design and Architecture	Department of Industrial Design	Industrial Design	1993
Zhejiang Sci-Tech University	School of Art and Design	Department of Industrial Design	Industrial Design Product Design	1996
Zhejiang A&F University	College of Art and Design	Department of Industrial Design	Industrial Design	1999
Hangzhou Dianzi University	School of Media and Design	Department of Art Design	Industrial Design Product Design	2000
China Jiliang University	College of Art and Communication	Department of Industrial Design	Industrial Design Product Design	2002
Zhejiang Gongshang University	Art Design College	Department of Product Design	Product Design	2012
Hangzhou Normal University	School of Engineering	Department of Industrial Design	Industrial Design	2022

Table Information as of June 2022

Source: official website of each university

Computer Science and Technology: 1) Institute of Modern Industrial Design^[1]. Existing laboratories related to industrial design in the College of Computer Science and Technology: 1) Product Design and Brand Planning Lab^[4], 2) Design and Entrepreneurship Lab of Zhejiang university^[5], 3) Cross-Device Computing Lab^[6], 4) Lab of Big Data for Innovative Design & Human Machine Fusion Exoskeleton Robot^[7], 5) Next Lab of Zhejiang University^[8], 6) STED Product Innovation Lab^[9]. In 2019, Zhejiang University's Industrial Design Major merged with Digital Media Technology Major to form an Industrial Design Major that integrates technology and creative design, digital technology and media, which is a model of combining science and technology with humanities and arts in China^[3].

**Figure.1** College of Computer Science and Technology, Zhejiang UniversitySource: <http://www.en.cs.zju.edu.cn>

(2) Current faculty of industrial design major

As of June 2022, serving in the Department of Industrial Design, College of Computer Science

and Technology, Zhejiang University, there are 20 faculty members: 1) Kejun Zhang(Department Head), 2) Xiaodong Li(Associate Department Head), 3) Wenjie Xu(Associate Department Head), 4) Shouqian Sun, 5) Sanyuan Zhang, 6) Fangtian Ying, 7) Xusheng Zhang, 8) Shijian Luo, 9) Yongchuan Tang, 10) Linfeng Zheng, 11) Ying Yang, 12) Chunlei Chai, 13) Qi Huang, 14) Lingyun Sun, 15) Xiang Chen, 16) Shi Chen, 17) Guanyun Wang, 18) Liuqing Chen, 19) Wei Xiang, 20) Dajun Li. The Department of Industrial Design, College of Computer Science and Technology, Zhejiang University faculty list, and their respective research directions, as shown in Table.2.

Table.2 Department of Industrial Design, College of Computer Science and Technology, Zhejiang University faculty list, and respective research directions

Serial Number	Faculty	Research Direction
1	Kejun Zhang (Department Head)	1. Artificial Intelligence 2. Affective Computing 3. Cross-media Arts and Design
2	Xiangdong Li (Associate Department Head)	1. Intelligent User Interface 2. Cross-Device Computing 3. Creative Media Design
3	Wenjie Xu (Associate Department Head)	1. Intelligent product Design 2. Medical Product Design 3. Home Design
4	Shouqian Sun	1. Innovative Design 2. Big Data 3. Exoskeleton Robot 4. Intelligent Design
5	Sanyuan Zhang	1. Images and Video Processing 2. Computer Graphics 3. Information Design
6	Fangtian Ying	1. Industrial Design 2. Product Design 3. Innovation Design
7	Xusheng Zhang	1. Integrated Product Innovation Research and Design 2. Non-Standard Automation Equipment Development 3. STEAM Education
8	Shijian Luo	1. Industrial Design 2. User Experience and Product Innovation Design 3. Service Design
9	Yongchuan Tang	1. Uncertainty in Artificial Intelligence 2. Design Intelligence 3. Cross-Media Design
10	Linfeng Zheng	1. Environment Art Design 2. Architecture and Landscape Design 3. Expo Display Design 4. Interior Decoration Design
11	Ying Yang	1. Product Design 2. Brand Design & Strategy 3. User Experience Design
12	Chunlei Chai	1. Digital Art and Design 1. Big Data of E-Commerce
13	Qi Huang	2. Smart Product Design 3. Interactive Design

(Continued).

Serial Number	Faculty	Research Direction
14	Lingyun Sun	1. Creative Intelligence 2. Design Intelligence 3. Information and Interaction Design
15	Xiang Chen	1. Computer Graphics 2. Computer-Aided Design
16	Shi Chen	1. Design Intelligence 2. Visual Design Computing 3. Information and Interaction Design
17	Guanyun Wang	1. Digital Fabrication 2. 4D Printing 3. Shape-Changing Interfaces 4. Human-Computer Interaction 5. Industrial Design
18	Liuqing Chen	1. Data-Driven Design 2. Creative Computing 3. Intelligent HCI 4. Artificial Intelligence
19	Wei Xiang	1. Design Intelligence 2. Crowdsourcing 3. Design Cognition
20	Dajun Li	1. Environmental Design

Table Information as of June 2022

Source:<http://www.en.cs.zju.edu.cn/gysjyjs/list.htm><http://www.cs.zju.edu.cn/csen/27058/list.htm>

3 The Current Development of Industrial Design Major in Zhejiang University of Technology

(1) Current development of industrial design major

Zhejiang University of Technology's Industrial Design Major, which is part of the Department of Industrial Design, School of Design and Architecture. School of Design and Architecture, Zhejiang University of Technology was established in 2000^[10], the Department of Industrial Design was established in 1993^[11], the logo of School of Design and Architecture, Zhejiang University of Technology, as shown in Figure.2. Existing institutes related to industrial design in the School of Design and Architecture: 1) Institute of Industrial Design, 2) Institute of Interaction design^[11]. Zhejiang University of Technology's Industrial Design Major, in November 2007, it was established as a key specialty major of Zhejiang Province, China, and in 2009, it was established as a key Subject of Zhejiang Province, China^[11].

(2) Current faculty of industrial design major

As of June 2022, there are 24 faculty members working in the Department of Industrial Design, School of Design and Architecture, Zhejiang University of Technology: 1) Xiaoyun Fu(Department Head), 2) Yun Li(Associate Department Head), 3) Yuning Zhu(Associate Department Head), 4) Zhichuan Tang(Associate Department Head), 5) Wei Huang, 6) Chunfu Lu, 7) Lufang Zhang, 8) Bing



Figure.2 School of Design and Architecture, Zhejiang University of Technology

Source: <http://www.design.zjut.edu.cn/asp/ReadClassDetail.jsp?bigclassid=1&sid=11>

Xu, 9) Shangshang Zhu, 10) Xinxin Qiao, 11) Ming Wu, 12) Jingsong Zhang, 13) Jianfeng Wu, 14) Yihao Zhu, 15) Zhen Zhou, 16) Yu Li, 17) Diaodiao Liu, 18) Hui Shao, 19) Yenan Dong, 20) Lekai Zhang, 21) Wenjie Li, 22) Yinghao Wang, 23) Ding Feng, 24) Yu Fu. Department of Industrial Design, School of Design and Architecture, Zhejiang University of Technology faculty list, and their respective research directions, as shown in Table.3.

Table.3 Department of Industrial Design, School of Design and Architecture, Zhejiang University of Technology faculty list, and respective research directions

Serial Number	Faculty	Research Direction
1	Xiaoyun Fu (Department Head)	1. Industrial Design
2	Yun Li (Associate Department Head)	1. Industrial Design 2. Design History 3. Design Theory 4. Art History
3	Yuning Zhu (Associate Department Head)	1. Product Development and Design 2. Cultural and Creative Product Design 3. Product Promotion
4	Zhichuan Tang (Associate Department Head)	1. Artificial Intelligence Design 2. Brain-Computer Interaction 3. Medical Product Design
5	Wei Huang	1. User Research 2. Product Development 3. Product Innovation Design
6	Chunfu Lu	2. Product Form Semantics 3. Industrial Design Strategy
7	Lufang Zhang	1. Industrial Design 2. Design Industry Strategic Planning
8	Bing Xu	2. Service-Oriented Manufacturing 3. Interaction Design
9	Shangshang Zhu	1. Industrial Design 2. Design Psychology
10	Xinxin Qiao	2. User Experience 3. Service Design
11	Ming Wu	1. Product Innovation Design 2. Concept Design

(Continued).

Serial Number	Faculty	Research Direction
12	Jingsong Zhang	1. Interaction Design 2. Service Design
13	Jianfeng Wu	1. Information and Interaction Design 2. Applied Ergonomics and Design 3. Service Design 4. Design Cognition
14	Yihao Zhu	1. Industrial Design
15	Zhen Zhou	1. Higher Education
16	Yu Li	1. Product Genetic Network 2. Ergonomics
17	Diaodiao Liu	1. Design Science
18	Hui Shao	1. Industrial Design
19	Yenan Dong	1. User Experience and Product Innovation Design 2. Creative Thinking and Design Methods Research
20	Lekai Zhang	1. Emotional Computing 2. Active Computing
21	Wenjie Li	1. User Experience and Product Innovation Design
22	Yinghao Wang	1. Health Product Design Technology and Design Method Research 2. Intelligent Office Space Product Design Technology and Industrialization 3. Inspection Robot Product Design and Industrialization 4. Infant Product Design and Industrialization
23	Di Feng	1. Industrial Design
24	Yu Fu	1. Design Cognition 2. Experience Design

Table Information as of June 2022

Source: http://www.homepage.zjut.edu.cn/50/list.htm?wp_tw_orgId=96&wp_tw_displayStyle=1&wp_tw_complete=1&wp_tw_orgName=设计与建筑学院&wp_tw_language=1&wp_tw_teachStatus=1&wp_tw_deptTecOrder=1

4 The Current Development of Industrial Design Major and Product Design Major in Zhejiang Sci-Tech University

(1) Current development of industrial design major and product design major

Zhejiang Sci-Tech University's Industrial Design Major and Product Design major, which are part of the Department of Industrial, School of Art and Design. School of Art and Design, Zhejiang Sci-Tech University was established in 1979^[12-14], the Department of Industrial Design was established in 1996^[15], the logo of School of Art and Design, Zhejiang Sci-Tech University, as shown in Figure.3. Existing research platform related to industrial design and product design in the School of Art and Design: 1) Zhejiang Industrial Design Technology Innovation Service Platform^[16]. Existing institutes related to industrial design and product design in the School of Art and Design: 1) Research Center for Industrial Integration and Innovation^[16], 2) Zhejiang Sci-Tech University Furniture Design Institute^[17]. School of Art and Design, Zhejiang Sci-Tech University is the secretariat unit of College Students Industrial Design Competition of Zhejiang Province^[13].



Figure.3 School of Art and Design, Zhejiang Sci-Tech University

Source: <https://ad.zstu.edu.cn/index.htm>

(2) Current faculty of industrial design major and product design major

As of June 2022, there are 20 faculty members working in the Department Industrial Design of School of Art and Design of Zhejiang Sci-Tech University: 1) Linglin Liang(Department Head), 2) Zuyao Zhang (Associate Department Head), 3) Jiu Zhou, 4) Xuchong Hu, 5) Juying Qin, 6)Yin Wang, 7) Zuoguang Wu, 8) Feng Li, 9) Xuelian Li, 10) Hongting Li, 11) Jue Wu, 12) Lu Lin, 13) Qun Wu, 14) Ying Wang, 15) Huichao Xia, 16) Lili Yuan, 17) Mang Xia, 18) Chao Li, 19) Yichi Zhang, 20) Jia Shen. Department of Industrial Design of School of Art and Design of Zhejiang Sci-Tech University faculty list, and their respective research directions, as shown in Table.4.

Table.4 Department of Industrial Design of School of Art and Design of Zhejiang Sci-Tech University faculty list, and respective research directions

Serial Number	Faculty	Research Direction
1	Linglin Liang (Department Head)	1. Product Integration Innovation Design 2. User Experience and Interaction Design
2	Zuyao Zhang (Associate Department Head)	1. Innovation Design of Product Form 2. Ergonomics
3	Jiu Zhou	1. Modern Textile and Silk Design Theory 2. Digital Textile Technology and Product Development 3. Design of Consumer and Home Textiles
4	Xuchong Hu	1. Industrial Design Furniture Product Design 2. Furniture Marketing
5	Juying Qin	1. Industrial Design 2. Traditional Arts and Crafts 3. Design Aesthetics 4. Design Education
6	Yin Wang	1. Full Process Product Design and Management 2. Full Process User Experience
7	Zuoguang Wu	1. Design Strategy
8	Feng Li	1. Industrial Design and Cultural Intelligent Manufacturing Research
9	Xuelian Li	1. Furniture Design and Industrial Engineering 2. Furniture Design Research
10	Hongting Li	1. Engineering Psychology 2. User Experience

Serial Number	Faculty	Research Direction
11	Jue Wu	1. Bamboo Material Research and Product Development 2. Innovation Design Methods and Approaches 3. Furniture Commercial Display Design System Research
12	Lu Lin	1. Product Development and Brand Planning 2. Research on Product Integration and Innovation 3. Research on "Zen Life" theme Product 4. Research on the Expansion of Traditional Materials in Modern Products
13	Qun Wu	1. Innovation Product Design 2. Ergonomics
14	Ying Wang	1. Research on Barrier-Free Design for the Elderly 2. Intangible Cultural Heritage 3. Cultural and Creative Industries
15	Huichao Xia	1. Product Development and Design 2. User Experience and Human-Computer Interaction
16	Lili Yuan	1. Industrial Design Product Development 2. Regional Cultural Revitalization
17	Mang Xia	1. Industrial Design
18	Chao Li	1. Functionalization of Natural Fibers 2. Furniture Design
19	Yichi Zhang	1. Innovation Design for Medical and Health Industry 2. Innovation Design of Product in the Context of Aging
20	Jia Shen	1. Industrial Design

Table Information as of June 2022

Source: <https://ad.zstu.edu.cn/szdw/szdw.htm>

5 The Current Development of Industrial Design Major in Zhejiang A&F University

(1) Current development of industrial design major

Zhejiang A&F University's Industrial Design Major, which is part of the Department of Industrial Design, College of Arts and Design. College of Arts and Design, Zhejiang A&F University was established in 1990^[18], the Department of Industrial Design was Established in 1999^[19], the logo of Zhejiang A&F University, as shown in Figure.4, the logo of College of Arts and Design, Zhejiang A&F University, as shown in Figure.5. Existing laboratories related to industrial design in the College of Arts and Design: 1) Ergonomics Lab, 2) Computer Aided Lab, 3) Material Awareness Lab, 4) Finishing Process Lab, 5) Integrated Model Making Lab^[20]. Major advantage: The Department of Industrial Design, College of Arts and Design is characterized by the use of bamboo and wood materials and the concept of ecological design, relying on the national product development platform and a number of off-campus practice bases, with close links to industry^[19].



Figure.4 Zhejiang A&F University

Source: <https://en.zafu.edu.cn>



Figure.5 College of Arts and Design, Zhejiang A&F University

Source: <https://art.zafu.edu.cn/index.htm>

(2) Current faculty of industrial design major

As of June 2022, there are 10 faculty members working in the Department of Industrial Design, College of Arts and Design: 1) Siyu Chen, 2) Rong Pan, 3) Jue Qian, 4) Guitao Fu, 5) Li Wang, 6) Qingchun Liu, 7) Chang Liu, 8) Jun Wang, 9) Haiying Wang, 10) Guodong Chen. Department of Industrial Design of College of Arts and Design of Zhejiang A&F University faculty list, and their respective research directions, as shown in Table.5.

6 The Current Development of Industrial Design Major and Product Design Major in Hangzhou Dianzi University

(1) Current development of industrial design major and product design major

Hangzhou Dianzi University's Industrial Design Major and Product Design Major, which are part of the Department of Art Design, College of Humanities and Digital Media. The Industrial Design Major, Department of Art Design, College of Humanities and Digital Media was established in 2000^[21], the logo of Hangzhou Dianzi University, as shown in Figure. 6, the logo of College of Humanities and Digital Media, Hangzhou Dianzi University, as shown in Figure.7. Existing institutes related to industrial design and product design in the College of Humanities and Digital Media: 1) Institute of Cultural Industry Innovation Design^[22]. Existing laboratories related to industrial design and product design in the College of Humanities and Digital Media: 1) Printworks Lab^[23], 2) Modern Product Innovation Design Lab^[24], as shown in Figure.8, 3) Pottery & Model Making Lab^[25], as shown in Figure.9, 4) Digital Capture Lab^[26], as shown in Figure.10, 5) Product Digital Styling Lab^[27], as shown in Figure.11, 6) Human-Computer Interaction Design Lab^[28], as shown in Figure.12. The Industrial Design Major and Product Design Major have formed a scientific and systematic teaching and research system by relying on the location advantage of the developed economy and flourishing industries in the Yangtze River Delta of China and the interdisciplinary advantages of Hangzhou Dianzi University^[29].

Table.5 Department of Industrial Design of College of Arts and Design of Zhejiang A&F University faculty list, and respective research directions

Serial Number	Faculty	Research Direction
1	Siyu chen (Department Head)	1. Industrial Design
2	Rong Pan	1. Home Product Design 2. Ceramic Product Design 3. Porcelain Printmaking
3	Jue Qain	1. Cultural and Creative Product Design 2. Product Innovation Design
4	Gu tao Fu	3. Humanized Design of Public Facilities 1. Product Design Creativity Theory 2. Product Modeling Grammar Theory
5	Li Wang	1. Innovative Design of Cultural and Creative Products 2. Agricultural Products Brand Promotion
6	Qingchun Liu	1. Integrated innovative Design 2. Product Bionic Design 3. Bamboo and Wood Product Craft and Design
7	Chang Liu	4. Model Design and Production 1. Home Decoration Products 2. Furniture 3. Bamboo Crafts
8	Jun Wang	4. Lamps 1. Product Design and Development 2. Display Design
9	Haiying Wang	1. User Experience Research 2. Interaction Design 3. User Psychology and Behavior Research
10	Guodong Chen	4. Software System Prototyping Design and Production 1. Product Cognitive Computing and Design 2. Medical and Health Product Design 3. Bamboo Product Innovation Design

Table Information as of June 2022

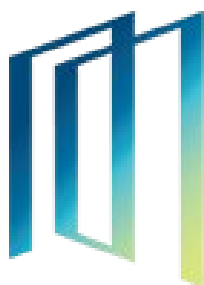
Source: <https://art.zafu.edu.cn/szll/gysj.htm>



杭州電子科技大學
HANGZHOU DIANZI UNIVERSITY

Figure.6 Hangzhou Dianzi University

Source: <https://www.hdu.edu.cn>



COLLEGE OF
HUMANITIES AND DIGITAL MEDIA
人文艺术与数字媒体学院

Figure.7 College of Humanities and Digital Media, Hangzhou Dianzi University

Source: https://syxy.hdu.edu.cn/_t384/main.psp



Figure.8 Modern Product Innovation Design Lab

Source: https://syxy.hdu.edu.cn/_t384/2018/1229/c6048a127728/page.psp



Figure.9 Pottery & Model Making Lab

Source: https://syxy.hdu.edu.cn/_t384/2018/1229/c6048a127729/page.psp



Figure.10 Digital Capture Lab

Source: https://syxy.hdu.edu.cn/_t384/2018/1229/c6048a127731/page.psp



Figure.11 Product Digital Styling Lab

Source: https://syxy.hdu.edu.cn/_t384/2018/1229/c6048a127732/page.psp

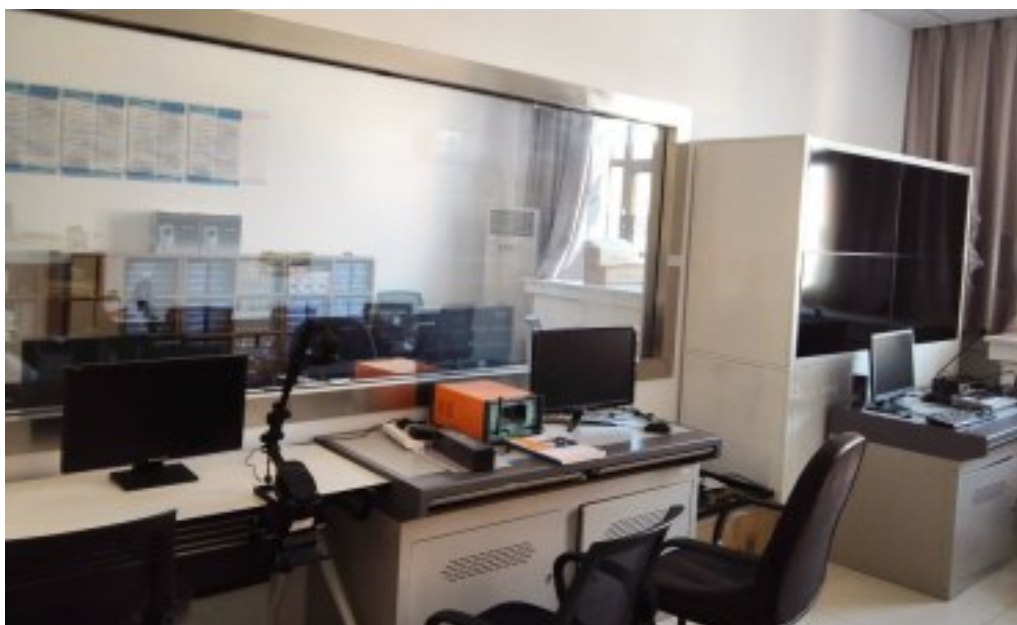


Figure.12 Human-Computer Interaction Design Lab

Source: https://syxy.hdu.edu.cn/_t384/2018/0524/c6048a127734/page.psp

(2) Current faculty of industrial design major and product design major

As of June 2022, there are 7 master's degree supervisors related to industrial design and product design working in the Department of Art Design, College of Humanities and Digital Media, Hangzhou Dianzi University: 1) Xing Liu(Head of Industrial Design Major), 2) Xiangquan Zhang(Head of Product Design Major), 3) Shan Guo, 4) Cheng Lin, 5) Jinying Qian, 6) Qian Sun, 7) Yan Shi. The Department of Art Design, College of Humanities and Digital Media, Hangzhou Dianzi University master's degree supervisors related to Industrial Design Major and Product Design Major list, and their respective research directions, as shown in Table.6.

7 The Current Development of Industrial Design Major and Product Design Major in China Jiliang University

(1) Current Development of Industrial Design Major and Product Design Major

China Jiliang University's Industrial Design Major and Product Design Major, which are part of the Department of Industrial Design, College of Art and Communication. College of Art and Communication, China Jiliang University was established in 2007^[30], the Department of Industrial Design was established in 2002^[31], the logo of the Department of Industrial Design, China Jiliang University, as shown in Figure. 13. Existing laboratories related to industrial design and product design in the College of Art and Communication: 1) Model Lab, 2) Non-Editing Lab, 3) Model Test lab, 4) Modeling Art Lab^[32]. The major is characterized by "integration of art and science" + "integration of industry and education", based in Zhejiang Province and facing China, building a "5+1" training system with the goal of cultivating student's creativity, realization, integration and other three major abilities, and the main body of five major components such as design, technology, users, business and culture plus standardization, cultivating high-quality talents with a sense of social responsibility, strong innovation and entrepreneurial spirit and practical ability^[33].

Table.6 Department of Art Design, College of Humanities and Digital Media, Hangzhou Dianzi University master's degree supervisors related to Industrial Design Major and Product Design Major list, and their respective research directions

Serial Number	Master's Degree Supervisor	Research Direction
1	Xing Liu (Industrial Design Major Head)	1. Product Service System Design 2. Innovation product Design Theory and Methods
2	Xiangquan Zhang (Product Design Major Head)	1. Intelligent Interaction and Innovation Design 2. Industrial Design Theory and Methods 3. Traditional Handicraft Design Research
3	Shan Guo	1. Brand Planning 2. Theory and Practice in Product and packaging Art Design
4	Cheng Lin	1. Visual Communication Design 2. Brand Identity Design 3. Digital Media Art
5	Jinying Qian	1. Visual Communication Design 2. Product and Brand Design 3. Cultural and Creative Product and Packaging Design
6	Qian Sun	1. Visual Design 2. Product and Packaging Design
7	Yan Shi	1. User Experience and Interaction Design 2. Intelligent Product Design and Theory Research 3. Research on Traditional Handicraft Design 4. Artistic Visualization

Table Information as of June 2022

Source: <https://syxy.hdu.edu.cn/2022/0324/c2219a152344/page.htm>



Figure.13 Department of Industrial Design, China Jiliang University

Source: <https://jilgs.cjlu.edu.cn/sy.htm>

(2) Current faculty of industrial design major and product design major

As of June 2022, there are 12 faculty members working in the Department of Industrial Design, College of Art and Communication, China Jiliang University: 1) Jinhua Xiao(Head of Department), 2) Xiaojiang Zhou, 3) Jue Gao, 4) Wei Huai, 5) Zhonghua Meng, 6) Hao Chen, 7) Wei Yan, 8) Shuwei Yu, 9) Linlin Zhu, 10) Duiyin Qin, 11) Yu Zhang, 12) Chaoyu Zhou. The Department of Industrial Design, College of Art and Communication, China Jiliang University faculty list, and their respective research

directions, as shown in Table.7.

Table.7 Department of Industrial Design, College of Art and Communication, China Jiliang University faculty list, and their respective research directions

Serial Number	Faculty	Research Direction
1	Jinhua Xiao (Department Head)	1. Home Product Design 2. Product Service Design 3. Design Education
2	Xiaojiang Zhou	1. Machine Tool Design 2. Instrument Design 3. New Product Development
3	Jue Gao	1. Home Product Design 2. Clothing and Accessories Design 3. Design Culture
4	Wei Huai	4. Design Methodology 1. Machine Tool Design 2. Medical Equipment Design
5	Zhonghua Meng	3. Sheet Metal Parts Design 4. New Product Development 1. New Product Development Design
6	Hao Chen	1. Transportation Design 2. Small Appliance Design 3. Product Semantics
7	Wei Yan	4. Product Development Design 1. Ceramic Product Design 2. Small Appliance Design
8	Shuwei Yu	1. Intelligent product Development Design 2. Medical Equipment Design 3. New Product Development
9	Linlin Zhu	1. Oil Painting
10	Duyin Qin	1. Industrial Design
11	Yu Zhang	1. Industrial Design
12	Chaoyu Zhou	1. Industrial Design

Table Information as of June 2022

Source: <https://ysycb.cjlu.edu.cn/zyjs/gysj/jsjs.htm>

8 The Current Development of Product Design Major in Zhejiang Gongshang University

(1) Current development of product design major

Zhejiang Gongshang University's Product Design Major, which is part of the Department of Product Design, Art Design College. Art Design College of Zhejiang Gongshang University was established in 1994^[34], the Department of Product Design was established in 2012^[35], the logo of Zhejiang Gongshang University, as shown in Figure.14, the logo of Art Design College of Zhejiang Gongshang University, as shown in Figure.15. Existing laboratories related to product design in the Arts Design College: 1) DJI Innovation Lab, 2) Product Design and Research Lab, 3) User Experience and Design Lab^[36]. Among them, DJI Innovation Lab, as shown in Figure.16 it is the first laboratory

established in a Chinese university by Shenzhen Dajiang Innovation Technology Co., Ltd^[37]. Product Design Major features positioning: under the business background of Zhejiang Gongshang University, focus on the frontier of discipline development and industrial development, one-stop training of new Product Design Majors with innovation, creative ability and industrialized economic awareness^[38].



Figure.14 Zhejiang Gongshang University

Source: <http://english.zjgsu.edu.cn>



Figure.15 Art Design College of Zhejiang Gongshang University

Source: <http://adc1994.zjgsu.edu.cn/english/>



Figure.16 DJI Innovation Lab

Source: <http://adc1994.zjgsu.edu.cn/newslist.asp?classid=88>

(2) Current faculty of product design major

As of June 2022, there are 7 faculty members working in the Department of Product Design, Art Design College of Zhejiang Gongshang University: 1) Chengfei He(Head of Department), 2) Hao Chen, 3) Xiaofeng Xu, 4) Qing Zhou, 5) Ruoyi Zhao, 6) Hanxiao Shao. The Department of Product Design, Art Design College of Zhejiang Gongshang University faculty list, and their respective research directions, as shown in Table.8.

Table.8 Department of Product Design, Art Design College of Zhejiang Gongshang University faculty list, and their respective research directions

Serial Number	Faculty	Research Direction
1	Chengfei He (Department Head)	1. User Experience Design
2	Hao Chen	1. Cultural Theory and Restoration Practice of Ancient Ceramics 2. Contemporary Handicraft Culture 3. Cultural Creation
3	Xiaofeng Xu	1. Product Design 2. Service Design 3. Culture Design
4	Qing Zhou	4. Theory of Design 1. Product Design 2. Country and Regional Cultural Design 3. Universal Design
5	Ruoyi Zhao	1. Product Design 2. Furniture Design 3. Cultural and Creative Product Design 4. Computer Aided Design
6	Tenggao Shi	1. Product Design
7	Hanxiao Shao	1. Product Design 2. Universal Design

Table Information as of June 2022

Source: <http://adc1994.zjgsu.edu.cn/teacherlist.asp?classid=20>

9 The Current Development of Industrial Design Major in Hangzhou Normal University

(1) Current faculty of industrial design major

Hangzhou Normal University's Industrial Design Major, which is part of the Department of Industrial Design, School of Engineering. School of Engineering, Hangzhou Normal University was established in 2022^[39], the Department of Industrial Design was also established in 2022^[39], the logo of School of Engineering, Hangzhou Normal University, as shown in Figure.17. Laboratories related to industrial design in the School of Engineering, with construction planned for 2023^[40]. The Industrial Design Major is divided into two directions: 1) Intelligent Product Design Direction, 2) Information Interaction Design Direction^[41]. The major is oriented to the development of intelligent manufacturing industry in Zhejiang Province, China, relying on the Internet industry gathering in Hangzhou City, Zhejiang Province, China, as the basis, through the cross-fertilization of disciplines, around the Intelligent Product Design Direction and Information Interaction Design Direction^[41].



Figure.17 School of Engineering, Hangzhou Normal University

Source: <http://eng.hznu.edu.cn>

(2) Current faculty of industrial design major

As of August 2022, there are 9 faculty members working in the Department of Industrial Design, School of Engineering, Hangzhou Normal University: 1) Zhiwei Zhu, 2) Keyong Hu, 3) Jialin Chen, 4) Yaping Sun, 5) Xia Ye, 6) Yuhuai Wang, 7) Kang An, 8) Jing Li, 9) Ling Qin. The Department of Industrial Design, School of Engineering, Hangzhou Normal University faculty list, and their respective research directions, as shown in Table.9.

Table.9 Department of Industrial Design, School of Engineering, Hangzhou Normal University faculty list, and their respective research directions

Serial Number	Faculty	Research Direction
1	Zhiwei Zhu	1. Computer-Aided Design 2. Product Design
2	Keyong Hu	1. Automation Control and Artificial Intelligence
3	Jialin Chen	1. Product Innovation Design 2. Design Methodology 3. User Experience Design
4	Yaping Sun	1. Electronic Information Engineering
5	Xia Yu	1. Drones 2. Autonomous Driving 3. Machine Vision
6	Yuhuai Wang	1. Intelligent Electromechanical Systems and Control, including Machine Vision Inspection Technology, Sheet Plastic Forming Technology, New Vibration Control Technology 1. Internet of Things Application Technology Development
7	Kang An	2. Machine Learning 3. Deep Learning Target Detection Research
8	Jing Li	1. Embedded Systems
9	Ling Qin	1. Product Design

Table Information as of August 2022

Source: <http://eng.hznu.edu.cn/szdw/jyscy/gysj/>

10 Conclusion

The universities in Hangzhou, China that offer Industrial Design Major and Product Design Major each have their own specialties. 1) Zhejiang University: exemplary features of the combination of science and technology with humanities and arts in China, etc., 2) Zhejiang University of Technology: all-around development of industrial design features, etc., 3) Zhejiang Sci-Tech University: furniture design features, etc., 4) Zhejiang A&F University: use bamboo and wood materials and ecological design concept features, etc., 5) Hangzhou Dianzi University: multidisciplinary features, etc., 6) China Jiliang university: "art and science integration" + "industry-education integration" features, etc., 7) Zhejiang Gongshang University: business background features, etc., 8) Hangzhou Normal University: intelligent product design and information interaction design features, etc.

The development of the manufacturing industry is one of the basic supports for the improvement of human living standards. Industrial Design Majors and Product Design Majors with their own characteristics promote the development of the manufacturing industry in Hangzhou, China, and help improve the standards of the people in Hangzhou, China. Hoping that the above universities will continue to develop their major's characteristics and strive to be based in China and go global for the benefit of mankind.

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